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Hearings. v. 10-12, 1958.

ROYAL COMMISSION

ON

ENERGY

HEARINGS

HELD AT

CALGARY,

ALTA.

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ROYAL COMMISSION

ON

ENERGY

Hearings held at Calgary, commencing Monday, February 3, 1958, at 10.00 A.M.

PRESENT:

Mr. H. Borden, C.M.G., Q.C.	--	Chairman
Mr. J.L. Levesque,	--	Member
Mr. G.E. Britnell,	--	Member
Mr. G.G. Cushing,	--	Member
Mr. R.D. Howland,	--	Member
Mr. L.J. Ladner, Q.C.	--	Member
Dr. R.M. Hardy,	--	Member

COMMISSION COUNSEL:

Mr. A.S. Pattillo, Q.C.

Mr. Miles H. Patterson.

Mr. J.F. Parkinson -- Secretary to the Commission.

Major N. Lafrance -- Assistant Secretary to the Commission.

APPEARANCES:

Representing Alberta and Southern Gas Co. Ltd.:

Mr. R.A. MacKimmie	-	Counsel
Mr. J.K. Horton	-	President of Alberta and Southern Gas Co. Ltd.
Mr. J.S. Moulton	-	Vice-President and Executive Engineer, Pacific Gas and Electric Company

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Saturday,
February 15, 1958.

---Upon resuming at 9.45 a.m.

---Mr. Commissioner Ladner was not present.

THE CHAIRMAN: Gentlemen, the Commission will resume its hearing. Mr. Pattillo?

MR. PATTILLO: Thank you, Mr. Chairman. This morning we are proposing to hear the submission of the Alberta and Southern Gas Company Limited and Mr.MacKimmie is here as counsel for the company and Mr. Horton, I understand, is going to present the brief.

Submission of

Alberta and Southern Gas Co. Ltd.

APPEARANCES:

Mr. R. A. MacKimmie -- Counsel

Mr. J. K. Horton -- President of Alberta and Southern Gas Co. Ltd.

Mr. J. S. Moulton -- Vice President and Executive Engineer, Pacific Gas and Electric Company

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MR. PATTILLO: I would like, first, to have the brief marked as an exhibit.

---EXHIBIT NO. C-15-1: Submission of Alberta and Southern Gas Co. Ltd.

MR. MacKIMMIE: If it please the Commission, as is evident from other presentations, Alberta and Southern Gas Co. Ltd. are an applicant before the Oil and Gas Convervation Board in the Province of Alberta to remove quantities of natural gas from Alberta through the system to the areas served by Pacific Gas and Electric to Northern and Central California, particularly the San Francisco Bay area, Pacific Gas and Electric being the distributor directly to its customers in that area.

With the Commission's permission, the brief will be given by Mr. J. K. Horton, who is the President of Alberta and Southern Gas Co. Ltd., and is, as well, Mr. Chairman, a Vice President of Pacific Gas and Electric.

I would mention, Mr. Chairman and gentlemen, that it might be appreciated, as the brief is given, that we have a number of witnesses here who will support some of the conclusions drawn by Mr. Horton's brief.

I might say, too, Mr. Chairman, I may well have missed the breadth of the hearing, for, after consulting with Commission counsel, we had this brief

[illegible]

prepared and did not, as did our friends, Westcoast, file the data and the material that was prepared for the application before the Conservation Board; and I would like it to be clearly understood, Mr. Chairman, that all of those submissions are most certainly available to the Commission. Mr. Pattillo did not think they were particularly germane, and I concur with him, but I would not want it to be understood, in any sense, that we are unwilling to produce any studies we have made.

THE CHAIRMAN: I think we understand, Mr. MacKimmie.

MR. MacKIMMIE: Thank you, Mr. Chairman.

I might also say, sir, that we would like to join the holy triumvirate and are quite prepared to have our witnesses sworn, if such meets the desire of counsel or the Commission itself.

For the purpose of the record, perhaps I might be permitted to put in the names of those witnesses who will be here and who are available to give any of the back-up data.

On the question of reserves and geology, we have Mr. J. Milton Wege, a senior official of the Ralph E. Davis firm of Houston, Texas, who are our consultant geologists.

We also have, sir, Mr. J. S. Moulton, Vice President and Executive Engineer, Pacific Gas and Electric Company. Mr. Moulton has been

in Canada for some time as a gas purchaser and has some knowledge, not only of the gas problems in Canada but, as well, in the United States; and, in line with some of the questioning Mr. Pattillo had the other day with reference to Westcoast's approaches to Pacific Gas and Electric some time ago, Mr. Moulton would be prepared to assist in any way he can within that field.

We have also Mr. Fred A. Hough and Mr. Duane Smith, both of whom are senior engineers of the Bechtel Corporation, who, I am sure, are known well to the Commission, and who have made the studies of cost estimates and pipeline design and selection.

Then we have Mr. K. C. Christensen, who is treasurer of Pacific Gas and Electric Company, which is one of the real guiding spirits behind this thing, and Mr. Christensen has worked out the financing, the extent of Canadian participation and so on, if such matters would help the Commission.

We also have Dr. Hu Harries, who is an economist in Alberta and who has made a study of the effect of our project on the economy of this province and he, too, sir, is available for the Commission and any counsel who may wish to question him.

Thank you, Mr. Chairman.

THE CHAIRMAN: Thank you very much. Mr.

Horton?

MR. HORTON: Yes, sir. Before I commence to read the brief, Mr. Chairman, may I say to you and the other members of the Commission how pleased we are to have this opportunity to present this submission this morning. I say that on behalf of my company and the companies that are associated with this project.

Introduction: The planned 327 million dollar pipeline to transport natural gas 1,300 miles from Alberta fields to California customers is unusual in the history of long distance natural gas pipelines in North America: 1) its principal sponsor is a retail distributor of natural gas; 2) the distributor has an existing market -- rather than merely a potential market which would require promotion or development; 3) the sponsor has contracted with the major public utilities operating in the area from which gas will be supplied to give such utilities first call on the gas purchased for the project, and 4) the sponsor is seeking only one thing -- an adequate supply based upon direct purchase from producers in the field and thence transported by the most economical and direct route to its market area.

The sponsors seek no promotional profit by virtue of their controlling interest in the equity of the pipeline; they seek to acquire no

new market areas from the proposed pipeline construction; they seek no subsidy from government to finance the project; and finally they seek no subsidy from producers, either in lower prices or in the form of a waiting period while the normal market build-up takes place at the outlet end of the pipeline.

The Project. Sponsors:

1. Pacific Gas and Electric Company (P.G. and E.) which is by most standards the largest privately owned gas and electric utility in the United States, with a service area encompassing most of northern and central C.lifornia (the principal sponsor).

2. Canadian Western Natural Gas Company Limited of Calgary (Canadian Western), and Northwestern Utilities, Limited of Edmonton (Northwestern), the major gas distributing utilities in the Province of Alberta.

3. Canadian Bechtel Limited of Toronto, and Bechtel Corporation of S n Francisco, international engineering and construction organizations which specialize in long distance pipelines. They will provide engineering and construction management for the project.

4. McLeod, Young, Weir & Company Limited and Dominion Securities Corporation Limited of Toronto, and Blyth & Co., Inc. of San Francisco, leading investment bankers, which will arrange for financing of the project.

5. The Montana Power Company, whose subsidiary, Canadian-Montana Pipe Line Company, will purchase approximately 6-2/3% of the gas to be exported.

Markets: There are two principal markets for the gas in this project. There is the market in the Province of Alberta, which is served by Canadian Western and Northwestern, the gas requirements of which are guaranteed by the agreement between them and Alberta and Southern Gas Co. Ltd. (Alberta and Southern). (The advantages of this agreement are described at page 20 of this submission).

Second, there is the large northern and central California market served by P. G. and E. P. G. and E. has been distributing natural gas since 1929. At the present time it serves in excess of 1,500,000 gas customers. Its peak daily sendout during the current winter season was 1.76 billion cubic feet of gas. Growth trends in northern California population and industry indicate that present requirements will increase

by an additional 450 milli n cubic feet per day by 1961, with a continued growth of approximately 100 million cubic feet per day each year thereafter.

The rate of consumption of Canadian gas in C.lifornia will not be subject to sharp seasonal fluctuations as in the local Canadian market. This relatively constant rate of consumption guarantees a high, i.e., 90 per cent or better, average annual load factor for the proposed Canada to California project.

C.lifornia is the most logical remaining market within economic reach of surplus Canadian natural gas. This becomes apparent when it is realized that the Trans-Canada and Westcoast systems will serve eastern Canada, the Pacific Northwest and possibly the midwestern United States.

P. G. and E. now supplies its customers from California fields, and from El Paso Natural Gas Company which transports gas from the southwest United States. In fact, roughly two-thirds of P. G. and E.'s total gas supply comes from El Paso. El Paso's system is the only out-of-state system serving the California market.

P. G. and E. considers it most important that an additional gas supply be provided for California from a new source, by means of a pipeline which is independent of its present principal supplier.

Schedule: Conditional upon obtaining necessary governmental permits and authorizations from the Alberta Oil and Gas Conservation Board, the Board of Transport Commissioners, the Department of Trade and Commerce, the United States Federal Power Commission and the California Public Utilities Commission, construction can start early in 1959, with completion scheduled for late 1960. An application by Alberta and Southern is now pending before the Alberta Oil and Gas Conservation Board.

Route and Capacity: The pipeline will begin approximately 120 miles northwest of Edmonton in the Windfall area, following a southerly direction along the foothills. Before crossing the Rockies via Crowsnest Pass it will connect with the tap line to Montana. The transmission line will cross the international boundary near Kingsgate, British Columbia, run southwest through Idaho, Washington, Oregon and California and terminate at Antioch, California. Over 1,300 miles will be spanned by the transmission line.

Thirty-inch outside diameter pipe will be used from the Windfall area to Rimbey, Alberta. From Rimbey to Antioch, California, 36-inch outside diameter pipe will be used. The transmission line will have an initial design capacity of 420 million cubic feet per day, while the capacity of the Montana tap line will be 30 million cubic

feet. The design of the pipeline will permit economic enlargement of the capacity, as may be justified by the supply of gas, to over 800 million cubic feet per day merely by increasing compressor facilities. Utilization of such enlarged capacity would decrease the cost of gas transmission approximately 10¢ per 1,000 cubic feet.

Just digressing from the brief a moment, there is a map in the frontispiece of the brief, Mr. Chairman, which shows, you might say, in birdseye form, the general route and the facilities which I have just described.

THE CHAIRMAN: Pardon me, Mr. Horton. That last sentence, "Utilization of such enlarged capacity would decrease the cost of gas transmission approximately 10¢ per 1,000 cubic feet," is that for the whole of the distancea?

MR. HORTON: Yes, sir.

THE CHAIRMAN: Over the pipeline?

MR. HORTON: Yes, sir.

Capital Expenditure:	
Canadian Section	$ 136,000,000
United States Section	$ 191,000,000
Annual Operating Costs:	
Canadian Section (including purchase of gas)	$ 46,600,000
United States Section	$ 29,200,000

Corporate Functions:

1. Alberta and Southern, a company incorporated under the Companies Act of the Province of Alberta, will be the purchaser of the natural gas in Alberta.

2. The Alberta Gas Trunk Line Company Limited will own and operate the transmission facilities within Alberta through which the gas purchased by Alberta and Southern will be transported from the various fields to a point in the vicinity of Coleman, Alberta.

3. The Montana Power Company through its subsidiary, Canadian-Montana Pipe Line Company, will receive approximately 30 million cubic feet of the gas per day at the point of interconnection with the project in Alberta.

4. S & M Pipeline Limited (S & M), a company incorporated by Special Act of the Parliament of Canada, will construct, own and operate the section of the pipeline extending from Coleman to the international boundary. Alberta and Southern has entered into an agreement with S & M providing for the transportation of the gas through this section of pipeline.

5. Pacific Gas Transmission Company (P.G.T.)

a company incorporated under the laws of the State of California, will construct, own and operate the section of pipeline extending from the international boundary to the Oregon-California border. Alberta and Southern has entered into an agreement for the sale of the gas to P.G.T. at the international boundary.

6. P. G. and E. will purchase the gas from P.G.T. at the California-Oregon border, and will construct, own and operate the section of pipeline extending from that point to the Antioch terminal.

Financing: Public financing has been planned for three of the above named companies, i.e., P. G. and E., P.G.T. and S & M. The capital requirements of Alberta and Southern will be nominal. The Alberta Gas Trunk Line Company Limited will plan and arrange for its own financing.

It is contemplated that both S & M and P.G.T. will have capital structures consisting of 75% mortgage bonds and term bank loans and 25% equity capitalization. No securities will be issued to individuals for services or for promotional activities. All securities will be issued against actual expenditures only. At the time of the public offering of the securities, the original investors will pay the same price as the public, less the actual underwriting commission and expenses.

With respect to S & M, 49% of the common capital stock of this company, in addition to mortgage bonds and bank loans, will be offered in the first instance to Canadian investors, with the balance of the stock being taken up by P.G.T.

With respect to Pacific Gas Transmission Company, P. G. and E. will own 50% of the common stock of this company and 25% will be owned by the other original investors -- Blyth & Co., Inc., Canadian Bechtel Limited, Canadian Western, Northwestern and The Montana Power Company. The

remaining 25% of the stock will be offered to Canadian citizens through McLeod, Young, Weir & Company Limited and Dominion Securities Corporation Limited and to American citizens through Blyth & Co., Inc.

The California portion of the pipeline will constitute a part of P. G. and E.'s general construction program, and will be financed in accordance with its normal practice.

In the opinion of McLeod, Young, Weir & Company Limited, Dominion Securities Corporation Limited and Blyth & Co., Inc., the project is financially feasible.

Reserves and Contracts: Alberta and Southern has entered into firm contracts with producers which provide for a total daily delivery quantity of 491 million cubic feet of gas to be produced from the following fields. (The fields are listed in geographical order, running from north to south within the province).

Mr. Chairman, I would like, with your permission, to have Mr. Moulton identify on the large map behind me the general location of the fields as I read them and, also, I think it might be of interest to the Commission if I were to indicate some of the companies with whom we have contracted in those fields, so that you will have, I think, a fairly good feeling of the producer support that

we have enjoyed with respect to this project.

Paddle River: Honolulu Tennessee Gas Transmission
Cities Service

Pembina: In that field there are a large number of producers, some 70 in number, and I think it includes all of the major and minor producers in the Province of Alberta.

MR. FRAWLEY: Are they all contracted to A and F?

MR. HORTON: No, sir, there is something roughly over 80 per cent of the producers that are signed today and we would expect, in the normal course of events, the remainder will join with us before the project is in effect.

Minnehik-Buck Lake: The contract we have there is with Alida.

Dick Lake, otherwise known as South Westerrose: California Standard, British American and Canadian Husky.

Homeglen-Rimbey: the contracts there, Shell, Texas Company and McColl-Frontenac.

Crossfield: Shell, Tennessee Gas Transmission, Imperial Oil, Siebens Minerals, Canadian Superior and Cities Service.

Sarcee: Shell.

Pine Coulee: Texas Company and Bailey-Selburne.

Castle River: Texas Company.

Waterton: Shell Oil.

There is a footnote at the end of this page with respect to Dick Lake: Daily delivery quantity assumed to be 100 million cubic feet pending operator's decision on size of processing plant.

These commitments involve contracts with a majority of the major producers in southwestern and central western Alberta (see Schedule A attached). The contract obligations become effective after all regulatory permits are obtained. Term of the agreements is twenty-five years. Price to producers, for other than Pembina oil field gas, commences at 13-1/2¢ per thousand cubic feet, increases to 14-1/2¢ on July 1, 1961, and escalates upward to 21¢ in 1983. Provision is made for price re-opening in 1968 and every five years thereafter.

In addition, Alberta and Southern has entered into option agreements under which the Company will be entitled to purchase additional gas developed from the holdings of Imperial Oil, Shell Oil and California Standard, in the general area west of the fifth meridian and south of the Athabasca River. Option agreements have also been entered into with other companies covering the following specific fields or areas:

Whitecourt area (including Windfall and Pine Creek)

Mr. Moulton is indicating that on the map.

Virginia Hills and Alhambra holdings of Mobil Oil

Here the companies involved are Canadian Fina, Pan-American and Hudson's Bay.

All of the option commitments are for a period of five years or more. They represent areas of considerable promise for future development. The extent of this development will be directly related to the creation of an export market. Under all of the option agreements (but not including the firm contracts referred to above) reserves totalling 7,714 billion cubic feet could be dedicated to the project.

With respect to the firm contracts, the company's consultant, Mr. Ralph E. Davis, has estimated the proven and probable reserves from the fields under firm contracts to total 4,799 billion cubic feet of which 3,849 billion are expected to be available to Alberta and Southern (see Schedule A attached). No attempt has been made to make reserve estimates applicable to the general option areas from Imperial Oil, Shell Oil and California Standard referred to above, nor from the following fields covered by specific options:

Virginia Hills

Alhambra

Beaver Creek

However, reserve estimates have been made on the following fields or areas under option,

totalling 701 billion cubic feet:

Olds

Windfall

Pine Creek

Availability for Export: With respect to the reserves of the Province of Alberta, the Company's consultant on November 5, 1957, completed a report as of July 1, 1957, showing disposable reserves of 20.8 trillion cubic feet. Many recent discoveries were not evaluated, however (including the Central Foothills area, Paddle River and others). Using the foregoing estimate, which is admittedly conservative, there is estimated disposable natural gas in the province of some 7.3 trillion cubic feet in excess of provincial requirements and authorized export (see Schedule B attached). The company seeks to export 4.2 trillion cubic feet over a 25-year period.

Presumably present export authorizations to other provinces in Canada are based upon present requirements or requirements as estimated at the time such export permits were originally obtained. Alberta and Southern recognizes the prospect of future growth in the demand for gas in Canada. At the same time recognition should also be given to the continuing trend of growth in proven reserves in the western provinces, and it is sound policy to project reserve increases over the same time period

used to calculate market requirements.

In other words, if the future market demand for gas in Canada is estimated by extrapolating the current market demand to 1970 or 1980, it logically follows that similar recognition should be given to the rate of discovery of new gas reserves and its resulting effect during the same years. Indeed, the rate of discovery and additions to reserves in the future -- with the stimulus that will come from an additional high load factor export market outlet -- should be much higher than the rate of discovery that has to date been largely incidental to the search for oil.

If I may depart from the submission, just briefly, Mr. Chairman, we think that the trend of new gas discoveries and the increase in net reserves is of very great importance and, actually, from the standpoint of our companies in launching this project, the trend over the last ten years is one of the most significant things with respect to the faith in this project. I would say that ten or, even, five years ago, perhaps, the use of trends should have been approached with caution but, it seems to us today that we have reached the point here where they can be used with considerable reliability in our own calculations; that is, those that have been made for us by Mr. Davis and his firm and they are supported by figures that you have

received from the Conservation Board and others indicating that during the last ten years the trend of net increase is on the order of 1-3/4 trillion each year.

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We think that the significance of that is very great, when you stop to think that 1 1/3 trillion net increase in reserves each year laid down beside the present requirements and the present export authorizations is in excess of 1 trillion 300 billion each year, and that even assuming that immediately the requirements of Trans-Canada were doubled overnight we would still be adding in excess of 1 trillion of net reserves each year. I mention that at this time not in an attempt to sermonize in any way, because that certainly would be presumptious on our part as a guest of the Commission; but, I thought the Commission would be interested in the point of view that influenced our people in watching this project at this time and that trend of reserve accumulation, I would say, is number one in significance from the standpoint of our thinking.

THE CHAIRMAN: I can assure you, Mr. Horton, you don't need to worry about sermonizing. The Commission needs all the assistance and advice it can get.

MR. HORTON: Thank you.

Actually all Canadian markets will benefit directly from the approval of our project:

1. Presently authorized export projects offer no particular stimulus to exploration and development in the foothills belt.
2. The western foothills belt is the area of

great promise.

3. If our project is approved it is our judgment that the producers will take immediate steps to develop that area in such a way that there will be a material surplus over Alberta requirements and those of our project -- all to the benefit of Canadian markets.

Economic Benefits: Stimulus to Exploration and Production:

1. The project will provide the shortest connection to the largest established market within economic reach of surplus Alberta gas.

2. The purchase of gas for the project makes available to the producers a net revenue which after deduction of royalty payments will be on the order of $20 million annually.

3. Natural gas development resulting from commitments to the project will stimulate Alberta producers to expend millions of dollars to develop gas properties. This pattern can be repeated many times by producers large and small, but it will not occur without the prospect of an immediate market outlet of this scope.

4. A large volume, high load factor project of this kind is essential to the efficient

production of the gas fields as compared to a smaller project or a project with a lower load factor.

Benefits to Canada: A firm substantial export market will be required to provide the necessary stimulus to develop a healthy natural gas industry in Canada. This was substantiated by the report of the Gordon Commission. Such an export market would be completely assured by the Canada to California project.

Hu Harries and Associates of Edmonton have prepared a study for Alberta and Southern showing the major economic effects of the project on the Alberta economy. The approach used has been to estimate effects on the income of Albertans for the period 1958-65, ignoring income already generated by well drilling, etc. in anticipation of eventual export. Gross income effects have been related to specific sectors of the economy. Although the study is oriented in Alberta, it presents merely specific illustrations of benefits which would accrue in varying degree throughout Canada. Obviously many of the products to be sold and consumed in Alberta, as a result of the economic stimulation provided by the project, will have to be obtained from other provinces of Canada. Similarly, much of the income earned by Albertans will be spent in other provinces.

The results of the study may be summarised

as follows:

1. The pipeline companies will spend $327 million in construction of the pipeline, $96 million of it in Alberta and $38 million in British Columbia. Producers will spend over $234 million to make gas available for export, during the period 1958-65.

2. Additional income generated within the province in the period will total $554.2 million. This is equivalent to $61.68 per year for every man, woman and child now in the province, or to $228.22 per year for every family, for the next eight years.

3. Additional employment opportunities will be created by the project, both directly and indirectly. Aside from temporary jobs in construction of the line and plants, etc. there will be the following permanent increase in employment:

Pipeline system	100
Producing companies	1,000
Indirect	8,900
	10,000

4. Retail sales will increase by a total of $304 million over the period, an average of $38 million per year.

5. Housing for permanent employees and their dependents, an estimated total of 30,000 persons, will require construction of 7,000 to 8,000 homes with an estimated value of $60 million to $70 million, excluding land.

6. Provincial government revenues from gas royalties alone will be increased by $18.7 million over the 1958-65 period. This overlooks any receipts from sale of gas rights or taxes, and thus is a minimum estimate of benefits accruing to the provincial treasury.

7. The trunk collecting and transmission lines within Alberta will be built by The Alberta Gas Trunk Line Company Limited. Residents who hold many of the shares of this company will benefit as a result of the enlarged scope of its operations.

Additional specific benefits which such a project will confer on Canada may be summarized as follows:

8. Annual net payments of a minimum of $23 million flowing from the United States to Canada (remaining after adjusting for payments from Canada to U.S.) will aid in correcting the balance of trade between the countries.

9. During construction of the pipeline system, 1,300 jobs will be provided in Canada for two construction seasons with a total payroll amounting to $12.5 million.

10. The project will provide the Canadian public with an opportunity to participate in the financing of a natural resource project consistent with the following conditions:

a) The guaranteed market and high load factor makes the project readily attractive to financing by private capital.

b) No financial assistance will be sought from either the Government of Alberta or the Government of Canada.

c) There will be no opportunity for the sponsors to purchase shares at a substantial discount below the offering market price.

Benefits to Gas Consumers of Alberta:

The sponsors of the project have recognized the primary importance of providing for the future requirements of the Province of Alberta. As previously stated, an agreement has been entered into by Alberta and Southern and Canadian Western and Northwestern, which will have the following beneficial results:

1. A long-term gas supply is provided at an advantageous price.

2. The Alberta Utilities will have first call on the gas which is purchased for the project.

3. There is a minimization of the necessity of large future expenditures on construction of transmission facilities solely for local needs.

4. Provision is made for standby facilities to supplement local systems on occasions of shut-down.

Conclusion: The features which make this project desirable for Canada may be summarized as follows:

1. The project makes available substantial quantities of additional gas for consumers within Alberta, and assures the people of Alberta that they will have complete protection for their present and future gas requirements.

2. The firm, guaranteed high load factor market makes the project readily financeable by private capital and provides an investment opportunity for the Canadian public.

3. The purchase price for gas offers a fair and compensatory return for this Canadian

resource, and substantial financial benefits to Canada.

4. The project will provide immediate and pronounced economic benefits to Canada through the further development of a strong natural gas industry and the many allied industries.

5. The principal sponsor has no conflicts or commitments which would interfere with a planned increase in export consistent with the amount of gas available in Alberta, the willingness of the Provincial and Dominion Governments to permit its export and the growth of the California market.

6. The project will stimulate exploration for natural gas with an expected result that additional proven reserves will be added to the energy resources of Canada.

THE CHAIRMAN: Thank you very much indeed, Mr. Horton.

Mr. Pattillo?

MR. PATTILLO: First, Mr. Chairman, I think we had better have all the witnesses sworn.

---Whereupon the following witnesses were sworn.

Mr. L.K. Horton
Mr. James S. Moulton
Mr. J. Milton Wege
Mr. K.C. Christensen
Mr. Federick A. Hough

Mr. Duane P. Smith
Dr. Hu Harries

Mr. MacKIMMIE: Those are all the witnesses, Mr. Pattillo.

MR. PATTILLO: Mr. Chairman, what I propose to do, because of the number of persons here who are prepared to give evidence on this company and its proposal, is to deal with subject matters; in other words, I am proposing to start out with the proposed financial set-up of the company, and I will ask the witness who is going to deal with that to come forward. I will examine, other counsel may do so, and then we will go to another subject matter.

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MR. PATTILLO: Would you please put on the record who the witnesses are who will be answering the questions relating to financing?

MR. MacKIMMIE: Mr. Christensen, Treasurer of Pacific Gas and Electric; and Mr. Horton will have to supplement some of those for the Canadian participation.

MR. PATTILLO: Then I will just direct the questions and either one of you gentlemen can answer.

Q. The first company I would like to inquire about is the Alberta and Southern Company itself. Would you please outline what the proposed corporate structure of that company is?

MR. HORTON: Alberta and Southern, itself, Mr. Pattillo, will be a wholly-owned subsidiary of Pacific Gas and Electric Company, and such capital requirements as it may have, as I have stated in the brief, we expect to be nominal. It will not own any facilities of any particular consequence and, therefore, we do not contemplate the necessity of financing.

Q. That company will be a wholly-owned subsidiary of P.G. & E.?

MR. HORTON: That is correct.

Q. The next one I want to ask about is S. & M. Pipeline Limited. Would you please explain the proposed corporate structure of that company?

MR. HORTON: You are speaking of the ownership of the equity stock?

MR. PATTILLO: Well, I want to have some idea as to how much of the assets it is proposed this company have, and also the ownership of the equity stock.

MR. CHRISTENSEN: I can answer that, sir. The capitalization of the S. & M. Pipeline is 25,000 shares of preferred stock, $50 par value ---

MR. FRAWLEY: Not too fast, please.

MR. CHRISTENSEN: --- and 1 million shares of no par common stock.

It is estimated that the initial facilities to be constructed by this company will have a cost of about $38 million and we propose to finance that in the following manner: 75 per cent, or about $28.6 million mortgage bonds and term bank loans and the balance of about $9 1/2 million equity capitalization, common stock equity.

As to the plans for the ownership of the equity, it is proposed that Pacific Gas Transmission Company, which Mr. Horton has referred to, will own 51 per cent of the outstanding capital stock of the company. The balance, or an amount of 49 per cent, will be offered, first, to Canadian investors through the firm of McLeod, Young, Weir & Company and the Dominion Securities Company Limited.

Incidentally, I might add that all of the

so-called debt capital of the company can be offered in Canada to the extent that there is a market for it.

Q. Now, when you are speaking about the equity capital and the holding of P.G. & E., are you talking about preferred stock as well as the no par?

MR. CHRISTENSEN: I should have made that clear. While the authorized capitalization provides for preferred stock, we have no present intention of issuing any preferred stock in connection with the initial project. The capitalization will consist solely of debt securities and common stock.

Q. What is it proposed that S. & M. Pipeline Company own? Where will its termini be?

MR. HORTON: On the facilities of British Columbia, taking gas at the boundary between Alberta and B.C., in the first instance, from the facilities of the trunk line, and running a line through British Columbia through the Crowsnest Pass area and then terminating at the international border, where it will connect with the facilities of Pacific Gas Transmission Company.

Q. Thank you. The next company I wish to inquire about is the Pacific Gas Transmission Company. Will you please tell us what it is proposed that this company own in the way of assets and

what its proposed capital structure is?

MR. CHRISTENSEN: The function of Pacific Gas Transmission Company is, as Mr. Horton, I believe, has indicated generally, to transport the gas from the international boundary near Kingsgate to a point on the California-Oregon border near Klamath Falls.

The estimated initial cost of the facilities of the company is approximately $123 1/2 million.

Again, the ultimate capitalization proposed is 75 per cent debt mortgage bonds and term bank loans and 25 per cent equity capitalization. In amount, there would be approximately $92.6 million of debt securities and $30.9 million equity securities.

In the case of Pacific Gas Transmission, we do contemplate an amount of preferred stock as a part of the 25 per cent equity capitalization.

The ultimate capitalization, then, more precisely, would be 75 per cent mortgage bonds and term bank loans; 8 per cent preferred stock and 17 per cent common stock equity.

Q. Now, would you please tell us, first, in connection with the mortgage debt, is it proposed that any portion of that be offered to the investing public in Canada, and, if so, how much?

MR. CHRISTENSEN: Yes, it is contemplated

that, through McLeod, Young, Weir & Company and Dominion Securities and their co-investment banking sponsor, Blyth & Company, that all of those securities can be made available to Canadian investors. I might point out, however, that that is the type of security that is normally taken by institutional rather than by individual investors.

THE CHAIRMAN: We have those, too.

MR. CHRISTENSEN: Yes, sir.

MR. FRAWLEY: Shades of the Trans-Canada.

MR. PATTILLO: Q. Is it contemplated that Blyth & Company, who are your United States financial advisors and brokers, are going to go to investors and investing houses in the United States and seek to place this debt financing, and, at the same time, are McLeod, Young, Weir & Dominion Securities going to be trying to do the same thing in Canada; or is there going to be, in the first, an arbitrary division and you will say, "We are going to get one-third of what we need in Canada and two-thirds in the United States"?

MR. CHRISTENSEN: No, sir, no arbitrary division is contemplated. We would like to see as much as possible of those securities placed with Canadian industry.

Q. Are you first going to see how much you can get in the Canadian market before you go to the United States?

MR. CHRISTENSEN: I would think that would be the plan of the investment bankers, that they would have to seek out the market and determine what market they could get in Canada and, I presume, after that, determine that the balance could be placed in the United States market.

Q. Because it is not clear from your brief whether you did contemplate that priority or not; but you say that is the idea?

MR. CHRISTENSEN: Yes, sir.

Q. Now, what about these preferred shares? How are they going to be issued and are they going to be simultaneously issued? I presume they would be simultaneously issued in the United States and Canada. Is there to be some arbitrary division as to how much or what percentage will be offered to the Canadian public and, if so, what is it?

MR. CHRISTENSEN: There will be no arbitrary division. It is hoped that Canadian investors will take the maximum amount of equity securities within their desire and wish.

Q. What I have difficulty in following in that, though, is this: this will be an American corporation and, unless there is some arbitrary division of how much is first going to be offered through the Canadian underwriters and how much is to be offered through the American underwriters,

I think we would probably find that the Canadians would not get very much.

MR. CHRISTENSEN: Well, it can be arranged that they would, the Canadian investor would have the right of first refusal so that they would have every opportunity to get whatever amount of securities they desire.

Q. Right. Now, coming to the equity in this company, is this the company in which it is proposed that the Alberta utilities and others have a share interest?

MR. CHRISTENSEN: Yes, sir.

Q. What are the percentages it is proposed be offered to these various companies and what are the names of the companies?

MR. HORTON: I would like to answer that, Mr. Patillo.

Q. Thank you.

MR. HORTON: Of the 25 per cent that is referred to in the brief, 9 per cent goes to Canadian Bechtel, 7 per cent to Blyth & Company, 7 per cent to the two Alberta utilities and 2 per cent to Montana Power. I hope that makes 25.

Q. As I understand it, these people will be required to pay the same monies as any member of the company will be required to pay on the day the shares are offered to the public, is that it?

MR. HORTON: Less underwriting discount

and commission.

Q. These persons you have just named will not be required to pay any underwriting costs?

MR. HORTON: No, sir, because there is no expence of underwriting in making those sales.

You are talking about the time when the stock is sold to the general public?

Q. That is so. Now, again, as I follow the proposal regarding this common stock, 25 per cent will be offered to both people in Canada and in the United States?

MR. HORTON: That is correct.

MR. CHRISTENSEN: That is correct.

Q. And has there been any consideration given to how that will be accomplished; whether there will be any arbitrary allocation to the Canadian market or not?

MR. CHRISTENSEN: No, sir; there will be no arbitrary allocation. Canadian investors will be given the right of first refusal.

MR. HORTON: That is a little clearer statement than we had in the brief, Mr. Pattillo, but that is our intention.

THE CHAIRMAN: And at the same price?

MR. HORTON: Yes, sir.

MR. CHRISTENSEN: Yes, sir.

MR. PATTILLO: Q. Now, Mr. Horton, would you just explain to me whether I have the right

concept of this whole scheme? Alberta and Southern will be a company purchasing gas from producers in the Province of Alberta and then it will cause its gas to be transported over the grid of the Alberta Trunk to the line of the S. & M. Pipe, and over the line of S. & M. Pipe to the international border?

MR. HORTON: That is correct.

Q. At which point it sells the gas, does it?

MR. HORTON: Yes, sir.

Q. And then to whom does it sell the gas?

MR. HORTON: To Pacific Gas Transmission Company.

Q. So that Pacific Gas Transmission becomes both a transporting company and the owner of the gas and, from there on, it transports its own gas rather than somebody else's?

MR. HORTON: In that sense, yes, it will be transporting its own gas only.

Q. To the border of California?

MR. HORTON: Correct.

Q. Where it sells the gas to P. G. & E.?

MR. HORTON: That is correct.

Q. And P.G. & E. will transport its own gas then over its proposed facilities into Antioch?

MR. HORTON: That is a correct statement.

Q. And I have correctly described the functions of each of the companies?

MR. HORTON: Yes, sir.

Q. Now, you state, in your brief, that there will be no promotional profits granted to anybody by way of issuing shares at a discount or giving options to purchase shares below the market. Is that a correct statement?

MR. HORTON: Yes, sir, it is a correct statement.

Q. Is any opportunity being given to any of the producing companies with whom Alberta and Southern have made contracts to acquire any percentage of the shares before they are offered to the public?

MR. HORTON: No, sir.

Q. And the only people who will have any opportunity to acquire shares other than the public in any of these companies we have been discussing are the persons you have named?

MR. HORTON: That is correct.

MR. PATTILLO: Thank you. Will you just wait? There may be other counsel who wish to ask you questions.

BY MR. FRAWLEY:

Q. Would you give me the percentages again of the 25 per cent that is being offered to the three or four companies? You say 7 per cent to the Alberta utilities?

MR. HORTON: Yes, sir.

Q. 7 per cent to Blyth & Company, and what are the others?

MR. HORTON: 9 per cent to Canadian Bechtel.

Q. Yes?

MR. HORTON: And 2 per cent to Montana Power.

Q. 2 per cent to Montana Power?

MR. HORTON: Yes, sir.

Q. And that makes 25. Now, why are you giving Blyth & Company an opportunity of buying 7 per cent of the common stock?

MR. HORTON: When we first conceived this project, we recognized that we had not been in the business of large-scale pipeline projects theretofore and we wanted to get the best advice and counsel that could be obtained with respect to those parts of the project that were quite important. Financing was one; engineering and construction was another, so we went to the people that we thought were expert in that field, and Blyth & Company have been giving us financial advice and counsel now on this project for some two years and more at

their own risk and their cost and they were, in essence, a logical partner and sponsor from the beginning.

Q. Well, did they give you this advice knowing or having contracted with you to give them 7 per cent of the common stock when it went on the market?

MR. HORTON: As a matter of fact, I am glad you asked that question, because none of the people to whom we have offered this participation have come to us and asked for it. There have been no strings on it. We have been the moving spirit and made the decisions ourselves and we have never had anything in writing with any of them during this two-year period when we were putting the project together.

The most they have known, speaking particularly of Blyth & Company -- and it would apply to the others -- is that some place along the line we wanted them to be a participant with us in this thing, financially, because we regarded them as partners.

Q. Well, they are only partners -- what they did, they did in the course of their professional work?

MR. HORTON: No, there is something more to it than that, Mr. Frawley. We are involved in pre-operational expenditures that have been accruing

now for some two years. If the project did not succeed, that money and those expenditures go down the drain.

Now, a part of this whole thing is that these pre-operational costs are being shared at this time, in those percentages, by the original participants.

Q. You mean that if they go down the drain they go down P.G.E.'s drain; but you say that some of it would go down Blyth & Company's drain?

MR. HORTON: That is correct.

Q. Canadian Bechtel is just the Canadian subsidiary of Bechtel International?

MR. HORTON: I think that is so.

Q. So, to all intents and purposes, it is an American enterprise?

MR. HORTON: Well, it is an international enterprise.

Q. Montana Power is an American enterprise?

MR. HORTON: Yes.

Q. I am putting to you -- and this, of course, Mr. Horton, is not something that you do not know about -- there was a great deal of talk last summer, a year ago, in Parliament about excessive American participation in the exploration of Canadian gas. That is putting it in very broad language, but you are aware of that?

MR. HORTON: Yes, sir.

A. And I think now is the time to examine ourselves very carefully to see if we can do something to keep the control and the opportunity to invest -- that is really what I mean -- in Canadian hands, and so I am looking pretty closely at that 7 per cent of your common stock to Blyth & Company, 9 per cent to Canadian Bechtel and 2 per cent to Montana Power, and that adds up to 18 per cent, and I just wonder if it is necessary. Of course, I can subject you to the same criticism that you have a lot of United States participation in the exportation of Alberta gas. I can only leave it with you and suggest those are some of the things that are going through my mind, all consistent with what I have declared here to be the objective of the Alberta Government, namely, gas exploration.

Now, when it becomes a matter of 25 per cent to the United States public or whatever it was, that could be more if you had not agreed to give 25 per cent to these corporations; but, anyway, you are giving 25 per cent to the United States and Canadian public and we have here, this morning, for the first time, heard that you will give first refusal of the whole 25 per cent to investors in Canada.

MR. HORTON: That is correct.

Q. Now, that becomes important when you

present your scheme to the Canadian Board of Transport Commissioners, does it not?

MR. HORTON: Oh, I would think so.

Q. It is not unimportant here, but it becomes of practical importance when you go and lay your scheme before that Board.

Now, do I understand there will be definitely, in that scheme, this first refusal you have told us about this morning?

MR. HORTON: Yes, that is our intention.

I would like to say this, Mr. Frawley, and I am sure you have it in mind, that all of the facilities in Alberta are to be constructed and financed by the Alberta Gas Trunk Line Company.

Q. Well, Mr. Horton, that was exactly the next question I was going to ask you, and, in my perhaps limited understanding of this thing, I would be bold enough to think, in my own mind, that you didn't need Alberta and Southern at all, as you have Alberta Gas Trunk. Now, am I completely wrong about that?

MR. HORTON: I think you are, because someone has to purchase the gas.

Q. Well, Alberta Trunk is an ordinary corporation, vested with all the powers that ordinary corporations have?

MR. HORTON: I do not conceive that they could occupy that function for us.

Q. Maybe you don't, Mr. Horton, but that is the only thing that Alberta and Southern are going to do; they are not going to transport a foot of the gas. They are going to buy the gas and immediately sell it when it gets through the trunk line.

MR. HORTON: I think you should understand our point of view on that.

Q. That is very important.

MR. HORTON: Alberta and Southern is our direct contact with the producers.

Q. That is right. Well, then I was saying, as you heard, its only real function is to go to the producers and buy the gas.

Now, what other important function has Alberta and Southern got?

MR. HORTON: That is a very important function, to us.

Q. Indeed it is. That is really its raison d'etre, isn't it?

MR. HORTON: We think one of the virtues of the project, not only from our standpoint but from the standpoint of others, is the fact that we can deal directly with the producers.

The transaction, in fact, between the retail distributor of gas and the producers themselves, if you have to put Alberta Trunk Line or anyone else in that immediate position of a whole-

saler in any way that we do not have the opportunity to control it, then you deprive us and the project of one of its most outstanding features.

Q. I am only concerned, it does not matter how many companies you introduce as long as it does not add to the cost and you do not think, in your scheme, in creating Alberta and Southern, that the sole and only purpose, the real purpose, is going out and making gas purchases to add to the cost?

MR. HOPTON: I will not add to the cost.

Q. I am interested, also, in the mortgage bonds. Coming back to the criticism of other schemes to export Canadian gas, a good deal turned on the fact that the mortgage bonds of other pipe lines were first sold to large institutions like Metropolitan Life and I am glad to think that you say today you are going to make available all that can be made available, Mr. Christensen. "All that can be made available" -- a lot will depend on how you go about that?

MR. CHRISTENSEN: They will be sold in the regular manner through public offering after having qualified under all the applicable security laws.

Q. A lot would depend on how you go about offering it to the Canadian and American investor. Are we to understand, again, in respect to the first mortgage bonds, the first refusal will be to the Canadian investor?

MR. CHRISTENSEN: We would like to say, all that the Canadians desire to take of these

securities.

Q. I must not pursue it too far; I just put it to you: are you going to really see to it that a reasonable opportunity for refusal by the Canadian investor is given?

MR. CHRISTENSEN: We shall see to it, sir.

Q. And the American investor will be held off, as it were, until the Canadian investors either take it or indicate to you they are not further interested?

MR. CHRISTENSEN: That will be the size of it, yes, sir.

Q. Because there is no doubt of it, apparently, a pipeline investment seems to have a great deal of attraction in this country.

MR. CHRISTENSEN: I so understand.

Q. We do not need to advertise any by putting their names on this record. Now, S and M, I do not want to -- I am perfectly serious in this question -- but it just happens that S and M was a special Act company that you ran across some place. Where I say a Special Act Company, a company incorporated by a special Act of Parliament to operate a pipeline. S and M was such a company and you seem to have heard of them. It is not your creation.

MR. CHRISTENSEN: No, sir.

Q. S and M is a pipeline that was incorporated some years ago, perhaps, for another purpose

by the Parliament of Canada and the charter was there with all its powers and you people acquired it?

MR. CHRISTENSEN: And it has the powers that are broad enough for our purpose.

Q. And whatever ownership it ever had has long since passed out and you people are the only sole owners of the S & M charter?

MR. CHRISTENSEN: That is correct.

Q. And now you propose to finance that as you have indicated?

MR. CHRISTENSEN: Yes, sir.

Q. Are you prepared to go before the Board of Transport Commissioners with your pipeline scheme for approval; and you will put into that scheme that there must be a first refusal by the Canadian investor, not only of your funded debt capital but of your equity capital?

MR. CHRISTENSEN: We are prepared to do so, yes, sir.

Q. Why is S and M necessary? Again, let me put the same question to you: why did you have to have this third company introduced to get Alberta gas down to Antioch?

MR. HORTON: I understand, on advice of Canadian counsel, we should have an interprovincial company, I believe you call it, with those powers in order to carry gas across British Columbia, and Alberta trunk line, really ---

Q. Was it that it saved you going back to Parliament again for another Act Company?

MR. HORTON: You asked me why we needed such a company and I attempted to answer that.

Q. Perhaps I should ask you, while I am talking about the offer to the Canadian investors, would it be too presumptuous on my part to ask you why you feel that only 49 per cent of the common stock of Pacific Gas Transmission should be offered to the Canadian public?

MR. HORTON: No. We considered at one time, as a matter of fact, making it exactly 50-50 but there are tax considerations, according to our tax counsel, that would dictate the advisability of making it 51-49.

Q. You see, Mr. Horton, this is a pretty important project as far as Pacific Gas and Electric is concerned.

MR. HORTON: Indeed it is, sir.

Q. Am I to understand, from what you say, that you are really going to supply Northern California, largely, through your Alberta Southern connections?

MR. HORTON: No. At the time the project is completed, I would say, in the scope that we have presented this morning it would constitute about a fourth of our supply.

Q. A fourth, just 25 per cent of the

total supply of P. G. and E.

MR. HORTON: Yes, I am speaking in round numbers, but that is about it.

Q. You also serve Southern California?

MR. HORTON: No, sir.

Q. P. G. and E. go how far south?

MR. HORTON: As far south as Bakersfield. The Southern California market is served by other companies, the Southern California Gas Company and the Southern Counties Gas Company.

Q. You serve the whole of California north of Bakersfield?

MR. HORTON: Speaking generally, yes -- all of the central and north.

Q. All through the S n Joaquin Valley and north?

MR. HORTON: That is right.

Q. Do you expect, after you have completed this arrangement, you will be taking 25 per cent of your supply requirements for this market from Alberta and El Paso?

MR. HORTON: Half; and half from California produced gas. This is a rough approximation.

Q. Twenty-five per cent is a very respectable share of your supply for that market?

MR. HORTON: Oh, indeed.

Q. I am wondering if you have, and I am

not putting the question critically but I just wanted to ask you, if you have made the very best possible effort to promote investment in your companies, that are interested in this by the people of Canada?

MR. HORTON: I think we have, sir, and I would like to say we have certainly done our best, trying to recognize that there are other factors involved; No. 1, we want to set up these companies so that we have control of them from California to Canada. That is another story. It is a very material part of this project to us, as distinguished from dealing with a pipeline company in between the two, which might have different interests from ours. So, if you start with that proposition and then you recognize, secondly, that some participation must be given to those interests that we have already described, that are participating originally as sponsors, and properly, in the project, then the stock that remains available for the public -- I contend the assurances we have given here this morning are a little different than the experience you have had to date in Canada in respect of these financing plans and I think we have really done very well. I am prejudiced, I admit.

Q. Mr. Horton, I am moved to some extent by what you say on page 19:

"The project will provide the

"Canadian public with an opportunity

"to participate in the financing of
"a natural resource project consistent
"with the following conditions."

That is true and that is a very important aspect of the whole enterprise and I am only putting it to you, I must not be presumptuous in telling you what is good for you, but I am suggesting that you should make the best possible effort to see that the Canadian public has the first possible opportunity, You agree with me, I suppose?

MR. HORTON: I certainly do and in the light of the other considerations I have mentioned, I think we have done that and I would like to, also, say this: the Canadian public has the opportunity, any day of the week, to invest in Pacific Gas and Electric Company.

Q. And you say, at the market?

MR. HORTON: Right.

Q. There are not any ground-floor opportunities left in Pacific Gas and Electric?

MR. HORTON: I don't think that there were.

MR. CHRISTENSEN: The Canadian investors have long had participation in the securities of Pacific Gas and Electric.

Q. The public in Canada is interested in gas and electric right now, more than it ever was. Is that not so, Mr. Horton?

[illegible]

MR. HORTON: I take it that is so.

Q. If you were ---

THE CHAIRMAN: Before making a break for ten minutes, while it is in my mind, from a question Mr. Frawley put to Mr. Christensen, I understand that Pacific Coast Transmission Company is an American corporation, is it not?

MR. HORTON: Yes.

THE CHAIRMAN: So it would be transporting gas south of the Canadian border to the Oregon and California border?

MR. HORTON: That is right.

THE CHAIRMAN: And you are offering a 25 per cent interest in the equity and, in effect, the first refusal and mortgage debt, the mortgage securities funded debt to Canadian shareholders but you may run into problems of United States currency, also, as this is an American corporation, may you not?

MR. CHRISTENSEN: Yes, sir, I think that is correct.

THE CHAIRMAN: I think there are some problems here -- I am perfectly in agreement with the spirit in which Mr. Frawley approached the problem but, I think, it should be put on the record that this is an American corporation and for various reasons and, I think, I know enough about legal background and things of that kind to

know that you would wish to have it as a controlled corporation for your own convenience, P.G. & E. Is that correct?

MR. HORTON: Yes, sir.

THE CHAIRMAN: And you have gone very far here, this morning, which is fine, but it is an American corporation and it is tantamount to asking Mr. Kayser of El Paso for an opportunity to purchase in that company.

MR. FRAWLEY: We should have asked him.

THE CH'IRMAN: We will now have a break.

---A short recess.

THE CHAIRMAN: Gentlemen, we shall now resume the hearing. Mr. Helman, I think you have some questions to ask.

BY MR. HELMEN:

Q. Has your company or any companies associated with your company any interest, directly or indirectly, in El Paso; that is, the El Paso Company?

MR. CHRISTENSEN: No, sir, none whatsoever.

Q. And in Pacific Northwest Pipeline?

MR. CHRISTENSEN: None whatsoever.

Q. Neither directly or indirectly?

MR. CHRISTENSEN: No, sir.

Q. I notice in this brief two of the sponsors are the local utility companies. How did they come to be interested in this matter?

MR. HORTON: We first went to them, Mr. Helman, when we were attempting to put the project together. We recognized that the statutory policy of the Province was what it was, and we thought, number one, it would be important to implement that policy by working out, if possible, some kind of a sharing agreement on gas of the type that we did work out that you know about. I should explain when we first conceived the project it was our hope and intention that we would actually engineer a contract to operate the pipeline facilities in the Province of Alberta as part of one integrated project, so to speak, and, as such, we felt it was logical that the Alberta utilities have an ownership participation in that Alberta pipeline that would be part of our project because it was going to be used to handle their gas, number one, and number two, the line was going to be travelling right through their back yard, so to speak, and it was, actually, from our point of view sensible that they have an ownership position in it, and we offered them an equity commitment in the project as a partner, and then there was the subsequent development, as you know, of the Trunk

line. At the time they wanted to occupy that field, so we fulfilled our commitment by offering them the stock participation described this morning.

Q. It was you that approached the local utilities companies?

MR. HORTON: That is right.

Q. Not the other way around?

MR. HORTON: Absolutely right.

Q. Nor was there any officer or director of the local utility companies that first approached your company?

MR. HORTON: No, sir.

Q. Did you arrive at a price for that 7 per cent participation of the local utility companies?

MR. HORTON: No, it was never discussed.

Q. Because there is a figure given in there that was given before the Conservation Board of what this 7 per cent was going to cost.

MR. HORTON: It must have been an estimate.

Q. It was an estimate; do you know what that estimate was?

MR. HORTON: I do not recall, but I would say it must have been an estimate because we do not know today what the price for the common stock will be, if it is going to be issued a year or two down the road.

Q. They did put a price in of slightly over a million dollars, if my recollection is correct.

MR. HORTON: I suppose Mr. Christensen here can make some kind of calculation based on the assumption of the amount of common stock equity we will have in that company, if you will bear with us for a moment.

MR. CHRISTENSEN: As I mentioned earlier, upon completion of the initial project contemplated by Pacific Gas Transmission, the equity capitalization would be about $30.9 million, which represents 25 per cent of the estimated cost of that 25 per cent; 8 per cent preferred stock, which leaves about 17 per cent to be financed in the form of common stock of the capital. If you take 7 per cent of the residual amount, it works out to something over $1 million.

Q. I was just trying to get, roughly, the figure. My recollection is they gave figures of $1,200,000. I do not have the transcript in front of me, but I understand it was somewhere around $1,200,000.

MR. WILLSON: Mr. Helman, as I remember, you pressed me for an answer, and I said I did not know what the amount would be, but I said it would be of the order of $1 million in each company.

Q. That would be $2 million.

MR. WILLSON: Yes.

Q. You understand that this investment is not part of their utility structure?

MR. HORTON: I do not think we are in a position to speak about that.

Q. Did you ask them to ascertain it?

MR. HORTON: No.

Q. Did you hear the evidence given at the Conservation Board?

MR. HORTON: I was not there every day.

Q. Did you hear that part of it?

MR. HORTON: I cannot adopt it, if that is what you ---

Q. If I told you they told me in the witness box it was not part of that utility part, then the net result of that investment in profits would go to International Utilities, would it not, Mr. Horton?

MR. HORTON: I do not know about that.

Q. You do not know about that, either.

MR. HORTON: No.

Q. With all your vast knowledge of the interrelation of these companies, you do not know that the International Utility industry practically has all of the stock in these two utility companies?

THE CHAIRMAN: The witness is on oath and he can only testify to the facts within his knowledge.

MR. HELMAN: Q. I am just asking if he has any knowledge about that? It has already been testified here by other witnesses.

MR. MacKIMMIE: I have no objection to my witnesses answering questions within their power, but I do think it is most unnecessary to ask Mr. Horton about utility companies in Alberta. Mr. Helman had the opportunity of examining the utility companies and, I submit, it is unfair.

THE CHAIRMAN: I was endeavouring, Mr. Helman, to indicate what I thought of your point.

MR. HELMAN: What I was trying to get at, Mr. Horton was trying to give the picture that this equity stock was going to be held by Canadians, and I wanted to put to him that so far as the two utility companies, that was not true, and, I submit, that is so and it is perfectly obvious that it is so.

MR. PATTILLO: Mr. Helman, I do not want to get into a wrangle about that, but I do not think the statement that you are making is a correct one at all. If you are two Canadian companies and acquiring shares, an equity, that is to say ownership of shares, and if that issue is owned by an American, it does not mean the American owns these shares.

MR. HELMAN: But it means the profits arising from these shares will go to an American

concern.

MR. PATTILLO: Again, with great respect, I do not think that is correct.

THE CHAIRMAN: There are Canadian shareholders of Canadian Western. I think Northwestern Utility is 99 per cent Canadian and Canadian Western, just last week, issued $4 million of preferred stock.

MR. HELMAN: But that was preferred, not common shares.

THE CHAIRMAN: Then the profit on this investment might help to pay off the preferred stock.

MR. HELMAN: That might be so, or it might not be so. The point is this: that was not part of their utilities investment, and the ratepayers for gas in the City of Calgary will get no benefit if money is made out of it.

THE CHAIRMAN: I understand your point, but I do not see how you can ask Mr. Horton, who is a vice-president of Pacific of Gas and Electric, to testify what is or what is not part of Canadian Western Gas Utility holdings.

MR. HELMAN: I thought, perhaps, in his discussions with the officers of the company, that was made clear to him.

Q. You did not hear anything about that position?

MR. HORTON: It would be hearsay.

Q. If you heard it from an officer of the company, I do not think it would be hearsay.

THE CHAIRMAN: That would not be within his knowledge.

MR. HELMAN: The fact that the statement was made by him would be within his knowledge.

Q. Was there any statement made to you about that?

MR. HORTON: I have to say, as I said before, I do not know that I am qualified to answer as to the stock of the utility companies as between them and international utilities. Beyond that statement I cannot help you.

Q. I observe that you say that the price of the stock, this equity stock, is going to be less underwriting costs. Have you any estimate of what these underwriting costs are going to be?

MR. CHRISTENSEN: I have not, at the present time. You can be sure that underwriting commitments and commissions will be negotiated at armslength and will be commensurate with the services performed and the risk assumed by the underwriters.

Q. I can understand that, but that does not give me any figure, at all. Have you recently investigated what underwriting costs are?

MR. CHRISTENSEN: I try to keep generally

informed on that, but I could not state here, today, what the going rate might be for that type of offering one or two years hence. I just would not want to answer or assume that.

Q. What would it be if it were offered at the present time?

MR. CHRISTENSEN: I could not state that.

Q. You cannot state that. So the net result is, we do not know what these underwriting costs are going to be?

MR. CHRISTENSEN: No, except you have my assurances we will make every endeavour to make them reasonable with the services performed and the risk assumed.

Q. I think Westcoast tried to do the same but we saw some startling results the other day. Aside from this investment of the utility companies, is there any benefit applied directly or indirectly which any officer or director of these two companies is going to obtain from your associated company?

MR. HORTON: No. I would say not, unless you want to include the directors' fees.

Q. Do you mean the directors' fees in Alberta and Southern?

MR. HORTON: Yes.

Q. There is no position being given by way of executive position to any employee of these

[illegible]

[illegible] such, more suitable for giving [illegible]

[illegible]

two utility companies or directors?

MR. HORTON: No.

Q. There is no promise of that kind outstanding?

MR. HORTON: No, none whatever.

Q. And you do not anticipate any such thing will happen?

MR. HORTON: No, sir. I might like to hire one or two of them some place along the line.

Q. You might like to?

MR. HORTON: But I have no hopes or expectations.

BY MR. FRAWLEY:

Q. May I ask one more question? Mr. Christensen, you were good enough to indicate in an answer to Mr. Helman, by making a calculation, just what the 7 per cent stock interest might be worth, and you said it would work out to somewhere around $1 million.

MR. CHRISTENSEN: I did not make a very precise calculation. If I had a minute or two, I could give you what 7 per cent of that would be.

Q. I do not want you to do that, if that is approximately the figure.

MR. CHRISTENSEN: 1,200,000.

Q. Mr. Willson interjected and said it would be worth a million dollars to each of the companies. Then I cannot but think the 7 per cent stock interest was worth $2 million because the 7 per cent stock interest is going to the two companies, as I understand it.

MR. CHRISTENSEN: That is correct. If I may make a precise calculation of what it would be, I think that would be best.

Q. Would you like to do that and put it in a little later?

MR. CHRISTENSEN: If you like, sir.

Q. I do not know whether to assume the 7 per cent is $1 or $2 million.

MR. PATTILLO: I think we had better have the calculation which only takes a minute.

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MR. CHRISTENSEN: Taking 7 per cent of the equity capitalization, Mr. Willson's figure is approximately correct; it is around $2 million.

MR. FRAWLEY: Q. As I understand it, the Alberta utilities will be given an opportunity to buy 7 per cent of the common stock for somewhere in the neighbourhood of $2 million?

MR. CHRISTENSEN: Common and preferred, if they wish to maintain a position in the preferred as well as the common.

Q. Does the 7 per cent stock interest include an interest in the preferred too?

MR. CHRISTENSEN: That is the total equity capitalization.

Q. And the same thing would apply to Canadian Bechtel, except a little bit better; they would have an opportunity to buy 9 per cent?

MR. CHRISTENSEN: That is correct.

Q. Which would put it up something more. Blyth & Company will have the same opportunity as to 7 per cent, and Montana Power the same opportunity as to 2 per cent?

MR. CHRISTENSEN: Yes, sir.

Q. The importance of that, of course, is that those companies are taking that in the hope that there will be an opportunity to dispose of it at a higher figure?

MR. CHRISTENSEN: I think that all of us hope that it will be a good investment.

Q. That is right.

MR. CHRISTENSEN: Yes, sir.

Q. Well, if I could buy this -- which is certainly getting down from something very big to something very little -- if I bought shares of it, it is probable that I would buy it to see it appreciate in the market and sell it?

MR. CHRISTENSEN: Well, we buy for two purposes: one, to receive income, and sometimes for capital gain.

Q. Yes, the capital gain is never absent from the investor in buying stock of this kind?

MR. CHRISTENSEN: I think they all hope for capital gain.

Q. Looking at at least that side of it, we can see Canadian Bechtel buying this stock on this base price such as you have given it to us, and it could be figured out at so much per share -- of course, with the calculation, did you work it out at so much a share?

MR. CHRISTENSEN: No, sir.

Q. Well, they will have an opportunity, perhaps, if it should double -- taking a very rough figure of doubling -- that they could make a capital gain of more than $2 million, in the case of Canadian Bechtel?

MR. CHRISTENSEN: Sir, I cannot speak for the partners, as to what ultimate disposition they may make of the stock, or if, indeed, there will be a capital gain.

Q. That is quite right. I am only saying, if they bought it for its capital gain possibilities and realized on the capital gain, they could conceivably make over $2 million, in the case of Canadian Bechtel?

MR. CHRISTENSEN: I can't quarrel with the arithmetic.

Q. Well, it is just arithmetic at the moment. It could be turned into real dollars -- of course, there is no permit yet. In the case of Blyth & Company it could be $2 million of capital gain?

MR. CHRISTENSEN: Well, again I cannot quarrel with your arithmetic, if that eventuated.

Q. You can't quarrel with my conclusion if those events took place.

MR. MacKIMMIE: Two and two are four, we agree.

MR. FRAWLEY: In Nova Scotia as well as in Alberta.

Q. Well, anyway, there are some possibilities of some capital gains along the line thanks to you bringing in these people whom you call partners?

MR. CHRISTENSEN: They are partners, and

we want and need them.

Q. Let us not get into too much of a discussion about the meaning of the word "partner", but to what extent is Canadian Bechtel a partner in this scheme -- a partner?

THE CHAIRMAN: I think that is a fine legal distinction. The witness is under oath and he is not a lawyer.

MR. FRAWLEY: That is right, and Mr. MacKimmie has not been sworn.

MR. MacKIMMIE: You and I could discuss that later, Mr. Frawley.

MR. FRAWLEY: Well, I have come off second best. Thank you very much.

BY MR. MacKIMMIE:

Q. Mr. Christensen, I don't want that halo to get too big. In answering Mr. Frawley with reference to Canadian participation in the mortgage bonds, I would like you to say, sir, is it normal that bonds are issued to individuals in a project of this size?

MR. CHRISTENSEN: No, sir. In a project of this character, in the United States -- and I believe it is also true in Canada, to the best of my knowledge and understanding -- the mortgage bonds are

normally privately placed with institutional investors. The reason for that is that there isn't, generally, any individual investor interest in securities of that type, and it is, therefore, normally the most economic and most expeditious way of selling pipeline bonds -- to place them privately with institutional investors. When I say "institutional investors" I have, of course, in mind insurance companies, savings banks, and so forth; just like we have institutional investors here in Canada in the bonds of Pacific Gas and Electric Company and in its stock. It was that type of market I was primarily referring to.

Q. Are you prepared to say this, that within the ability of these bonds to be marketed to Canadian investment houses, that this company will encourage Canadian investment brokers to take as much of the bonds as we can?

MR. CHRISTENSEN: We will endeavour to do the best we can, at the time the securities are sold, in that direction.

MR. FRAWLEY: After all, this is not a piece of litigation, but with all respect, Mr. Christensen said, in my recollection, a little more than that to me. He said he would give the first refusal of the first mortgage bonds to the people of Canada, be they institutions or private investors. We are dealing with highly reputable people, and I

would not want any other impression to be taken from what I am saying -- highly reputable and very welcome guests from the State of California, but I think there is a difference between saying, "We will do the best we can", and saying firmly, "We will give the first refusal to Canadian institutions." You will recall the Chairman indicated we have institutions in Canada also, and I am putting it to you whether you will go before the Board of Transport Commissioners -- because that is where I have seen it to look at it -- and there will be included in the scheme a firm first refusal given to Canadian investors and institutions with respect to the first mortgage bonds of Pacific Gas Transmission and S. & M. Pipeline. That is what I want to have clear in my mind.

THE CHAIRMAN: I think, Mr. Frawley, when that question arose before the break, I wasn't quite sure that you were aware or had realized when you spoke of this that it will be an American company.

MR. FRAWLEY: Yes.

THE CHAIRMAN: And that there will be, as I see it, United States dollar expenditures down there, and Canadian dollar expenditures up here.

MR. FRAWLEY: Yes.

THE CHAIRMAN: So, how far you wish these people, who have not anticipated this question and

who are under oath, to give a firm undertaking -- I think you are hitting them pretty quickly.

MR. FRAWLEY: Well, Mr. Chairman, perhaps in view of what you say I should make my position clear. I may sound as if I am telling these people what they should do for their own good, but I am very conscious of what happened here in this country twelve months ago about the very thing we are discussing, and I simply want to make it clear, and even though it happens to be -- and maybe necessarily is -- an American corporation, it is only a circumstance that it is an American corporation. This is, I regard, the export of Alberta's natural gas. The mechanics of it require that an American corporation be set up to carry the gas from the British Columbia/American border to Antioch, California, to where it is delivered to P.G. & E. However, because that happens to be the American corporation, it should not mean they will throw up their hands and say, "We would like to offer this to Canadian investors, but, being an American corporation, and the difficulties which surround the offering in Canada of American securities, we may not be able to do that at all".

Let me ask you this question: would it be quite impossible for you to transmit that gas from the B.C./U.S. border to Antioch, California, through the instrumentality of a Canadian corporation,

properly licensed and registered in the United States?

MR. CHRISTENSEN: I am not an attorney, but I would think it would be virtually impossible.

MR. FRAWLEY: I will take it that means you must have an American corporation to peform this function of carrying our gas to California. I want to know as well as you can tell me -- and if you can't tell me today, I would like to know later -- what are the insurmountable difficulties of doing what I suggest you should do -- to give the Canadian people first refusal of the debt capital of P.G. Transmission?

I leave it with you there, and I don't think I can pursue it any further in the light of what the Chairman has said.

THE CHAIRMAN: Oh now, don't blame me. I am as much in favour of the Canadian getting the first refusal of all these securities as you are, but I think we should give these gentlemen time to commit themselves on a matter of that kind.

MR. FRAWLEY: Far from blaming you, sir, I am very much obliged to you, that you know so much more about these matters than I do, and I am exceedingly glad you interjected and said what you said, which gave me an opportunity to pursue it as I have now pursued it.

THE CHAIRMAN: Thank you for that comment.

MR. PATTILLO: I think that is all, unless the Commission has any questions.

THE CHAIRMAN: I don't know about the other Commissioners, but I have one or two questions I would like to ask. We left out this little orphan -- the Montana Power Company, with a 2 per cent interest: Is that an American company?

MR. HORTON: Yes, that is an American company.

THE CHAIRMAN: Is that a company that now receives gas at the border to supply ---

MR. HORTON: That is my understanding, yes.

THE CHAIRMAN: Would you mind explaining to us how they happen to come into this?

MR. HORTON: Yes, indeed. The explanation is not too dissimilar from that which I gave with respect to Alberta utilities insofar as the reason for the financial participation is concerned. To go back, when we first conceived the project and started talking to producers, it was made known to us that Montana Power wanted additional gas if possible from Alberta, and they came to us and asked if we could make some small quantity from our total project available to them. As stated in the brief, we subsequently did agree to sell about 6 2/3 per cent of our initial project, or, 30 million feet a day to Montana. We did so at the time with the idea in mind that it would be difficult for us

to justify a duplication of facilities in the same general area, and it just seemed to make sense from the standpoint of our total project since we were going fairly close to what would be the normal point of take-off for them.

Originally I said we conceived and hoped that we would own the pipeline facilities in Alberta, but it didn't work out that way. It was one of the things on the drawing boards. In those days Manitoba said, "We are going to buy 30 million feet a day and we would like an ownership position in those facilities that, in part, are going to serve our needs." That made some sense to us, and we said, "It is too early to work out participation, and so on, but you will have participation." When Trunk Line occupied that field we felt we had made a commitment and we should stand up to that commitment, and we offered them this participation in the remainder of the project.

That is a rather long answer, but it is understandable you would inquire why they have a 2 per cent position in Pacific Gas Transmission, which does not really touch their area of operations.

THE CHAIRMAN: Can I get back to the chart at the front of your brief. I take it that is the projection of the Alberta Trunk Line, going down to the border at a point which I think is called Cut Bank.

MR. HORTON: Yes, sir.

THE CHAIRMAN: Where you have the black line running up, where it goes over to the eastern corner of Alberta, that is an existing pipeline?

MR. HORTON: That's right.

THE CHAIRMAN: I am a little ignorant about this because the Montana Company has not yet been before us. My understanding is -- and it is purely hearsay and background only -- that they have a permit for the export of gas from Alberta at the present time which was renewed five years ago or three years ago, would it be, for a period of five years. It has only about two years to run.

Can anybody correct me?

MR. PATTILLO: That is correct.

THE CHAIRMAN: Does this envisage that, in the event that that export permit were not renewed, that you could supply them with gas from your pipeline in the northwestern corner of Montana in the United States, as distinct from Canada?

MR. HORTON: I think they are part of

our project as presented here. Of course, I cannot speak for them, but I believe they intend that that would be supplementary to any existing supply they have from the southeastern section of Alberta.

THE CHAIRMAN: Supplementary and not a guarantee of the continuance of existing supplies, do you mean?

MR. HORTON: Under the earlier permit?

THE CHAIRMN: Yes. As I understand it -- and I want to get the reason for this and what could happen -- as I understand it, the permit has two years, say, to run.

MR. HORTON: Yes.

THE CHAIRMAN: Under which Montana, Canadian Montana, takes 273 million feet, I think it is, out of Alberta into Montana. Now, assume that that export permit were not extended. Does this project you have in mind envisage or make possible the supplying of gas to the Montana Power Company in Montana from the northwest corner of the State of Montana within the United States border?

MR. MacKIMMIE: Mr. Chairman, I wonder if I could speak to that?

THE CHAIRMAN: Certainly. I am seeking information.

MR. MacKIMMIE: I appeared for Canadian

Montana before the Conservation Board with reference to this application that is pending. It was suggested that because it may be part of the whole that I might well act for both; but I would, sir, like to advise that when we go beyond the Conservation Board to the Board of Transport Commissioners and to the Federal Power Commission, Canadian Montana's 30 million cubic feet a day, or that 6 per cent, will be the subject of a separate application of its own and we then part company completely.

Now, with reference to what is going on today, if you look at the map there is gas coming from southeastern Alberta and on beyond the black line running across the border to Calgary is where it ends. The connection then going northwesterly to the trunk line system then would have to be constructed.

With reference to the permits, it is my understanding Canadian Montana has a 20-year permit from the Provincial Government but only a five-year permit from Canada. If their permit is not resumed beyond five years (and I assume Canadian Montana will not be able to deliver gas through its present system if they do not succeed in their present application) then they will be getting no gas from us and that part of the project will then be divorced.

Have I made it clear, sir?

THE CHAIRMAN: Yes, you have made it clear, except with respect to one point. What would there be to restrict the Pacific Gas Transmission Company from supplying that gas by a spur from its present line in the northwest corner of Montana to its point of delivery?

MR. MacKIMMIE: Montana will have to have a permit to get that gas before we could deliver. We would have to have a permit from both the Provincial and Dominion authorities and the Federal Power Commission, sir.

THE CHAIRMAN: That answers my question. Thank you.

MR. FRAWLEY: Mr. MacKimmie, to what extent is this scheme relieving Canadian Montana from any difficulty they may get into because they only have a five-year permit under the Fluid Export Act?

MR. MacKIMMIE: There is no connection between the two, Mr. Frawley.

MR. PATTILLO: I am not sure that Mr. MacKimmie understood what you were asking, Mr. Chairman, because I don't think that the answer he gave is necessarily correct.

If a permit to import is obtained from the United States authorities by Pacific Gas Transmission Company and a permit to export was obtained

by the Alberta and Southern Company, then once the gas went over the border and it was the property of the Pacific Gas Transmission Company and was being carried, in part, through the State of Montana, I cannot understand why, in the State of Montana, which is beyond the control of Canada, the Montana people could not have a take-off point.

THE CHAIRMAN: Yes, without any reference whatsoever to any Canadian jurisdiction. You might still require a permit or a change in the permit from the Federal Power Commission which requires the Pacific Gas Transmission Company to take the gas to Antioch.

MR. MacKIMMIE: Let me say that the Pacific Gas Transmission Company have nothing in Montana.

MR. FRAWLEY: Idaho.

MR. PATTILLO: Well, according to this map, that is so.

THE CHAIRMAN: Have we left out the State of Idaho? We have not divided the State of Idaho from Montana on the map. Let us get up in the northwest corner of the Bitter Root Range.

MR. MacKIMMIE: The Pacific Gas Transmission starts in Montana and Idaho, having received the gas from S & M. Pacific Gas Transmission cannot help Canadian Montana's problems. They must build their own system to hook up with the trunk line company.

THE CHAIRMAN: I am speaking of the Montana Power Company that needs the gas that Canadian Montana is now supplying. The Montana Power Company in Montana presently receives gas from Alberta through the Canadian Montana Pipeline Company, is that right?

MR. MacKIMMIE: From those fields in the southeastern portion of the province.

THE CHAIRMAN: And there is an export permit from the Board of Transport Commissioners, as far as Federal jurisdiction in Canada is concerned, which permits that to be done, which will lapse if not renewed or extended within a matter of two years.

MR. MacKIMMIE: Yes, sir.

THE CHAIRMAN: Pacific Gas Transmission Limited, by taking gas from the border down through the northwest corner of the State of Idaho, you tell me it is -- is that right?

MR. MacKIMMIE: Yes, sir.

THE CHAIRMAN: Suppose, two years hence, when those things happen, that the export permit to the Montana Power Company -- and I am only using this as an assumption -- is not extended. Will it then be possible for the Montana Power Company, in conjunction with the Pacific Gas Transmission Company, wholly within the United States, for the Pacific Gas Transmission Company to supply the Montana Power Company with its requirements?

MR. HORTON: I can say, Mr. Chairman, if

I may, that, speaking for the company, we have no such intention of supplying Montana from Pacific Gas Transmission.

THE CHAIRMAN: I would like to know, though, Mr. Horton, in answer to my question, whether it is possible, having regard to the present situation, jurisdiction-wise, with respect to permits ---

MR. MacKIMMIE: I suppose, Mr. Chairman, Canada would have little control once the gas has gone into the United States and I suppose, then, there is no distinction between Montana Power Company being a customer or anyone else being a customer.

However, before Canadian Montana could take that gas interstate, there would have to be a hearing before the Federal Power Commission and they would have to show their supplies.

THE CHAIRMAN: But that would be purely a matter within the jurisdiction of the United States?

MR. MacKIMMIE: I think so. I am sorry I misled you. Once the gas has passed over into the United States, while it is not part of our project and we have no intention of selling part of our gas to Montana, which we need for ourselves ---

THE CHAIRMAN: But it could happen?

MR. MacKIMMIE: As far as my knowledge is concerned, it could.

THE CHAIRMAN: Although that has nothing to do whatsoever with the two companies' interests, the Montana company and your project?

MR. HORTON: No, sir. It is as I explained it.

THE CHAIRMAN: And that matter has never, I take it, been discussed?

MR. MacKIMMIE: Of course, sir, you appreciate that if Canadian Montana failed in their obligation to get this gas, as part of our project now, we would be completely divorced.

THE CHAIRMAN: But that is a supply of additional gas?

MR. MacKIMMIE: Yes, sir.

THE CHAIRMAN: I take it, Mr. Horton, this has never been a matter of discussion?

MR. HORTON: No, and, as a matter of fact, there is probably one other answer, from a practical standpoint, Mr. Chairman.

I cannot give you figures, but just looking at the map and knowing something about the terrain there, for 30 million feet a day or any quantity you would like to have, I would doubt very much whether it would be financially feasible for the Montana company to go over across that mountain range and pick up the gas, up in Idaho, at that point; but I know that was not your question, Mr. Chairman.

THE CHAIRMAN: Then would you be good enough to explain to the Commission why the cost, the Canadian cost of the pipeline system that is given here on page 6 is at that figure? There is a further breakdown on page 17, the first paragraph of which reads:

> "The pipeline companies will spend $327 million in construction of "the pipeline, $96 million of it in "Alberta and $38 million in British "Columbia."

Is that ninety-six and thirty-eight entirely on the pipeline?

MR. HORTON: Yes, and the facilities to our pipeline.

THE CHAIRMAN: Does that include more than the S and M pipeline?

MR. HORTON: The S and M pipeline is the $38 million and what we have used is estimated costs for the trunk line in the $96 million.

THE CHAIRMAN: The trunk line in Alberta?

MR. HORTON: Yes.

THE CHAIRMAN: From Coleman to where?

MR. HORTON: Up to a point near Windfall.

THE CHAIRMAN: Then you are really including the cost of the Alberta Trunk?

MR. HORTON: Yes.

THE CHAIRMAN: N w, I am really going to go off the deep end, while we have your Mr. Black and Mr. Bechtel I see sitting there, and others, and I would like to ask a question which you may consider to be foolish:

I would like to know, and I think the Commission would like to know: has any discussion ever taken place between your organization and Trans-Canada Pipe Lines with respect -- I was thinking in terms of gas flowing three ways from Western Canada -- between your organization and Trans-Canada and then 'estcoast servicing in British Columbia?

You say, in here, that you are prepared and your contracts , I believe, take that for granted, clearly, to protect the consumers of gas in the Province of Alberta. We are concerned with protection of the Canadian citizen as well as the citizen of Alberta and I wonder -- and this is pure speculation, just thinking out loudly with you -- whether any thought has been given to the possibility of tieing in a proposal such as your suggestion, going southward, with a Trans-Canada, going east and a Westcoast, going west to service British Columbia, down through the Peace River district or whatever the route may turn out to be, and in that way wouldn't the citizens of Western Canada, the western coast,

the citizens of the Prairie Provinces, the citizens of Eastern Canada and the citizens of the western Pacific northwest (I am not speaking of the company) and the western States be serviced to the best advantage, having regard to the availability of gas reserves of this country?

MR. HORTON: Well, I think, Mr. Chairman, that down the road, from the standpoint of pipeline facilities that will be connecting with the Trans-Canada transmission system and our proposed project, it would very likely, from a facility and gas movement standpoint, provide just that kind of a vehicle.

In other words, as time goes on, the Alberta Gas Trunk Line, which would own these facilities we have described, running down the western foothills, will cross a point in the southern part of the province. That is a planned expansion, as I understand it from their present facilities, to serve Trans-Canada and once you get the stimulus that comes from another export project such as ours and more of the fields are developed, that trunk line grid will naturally reach out to pick up those that are economical and, from a standpoint of the transfer of gas back and forth, the possibilities of exchange to meet varying requirements are virtually unlimited.

Now, you asked me originally whether we had any discussions with Trans-Canada along this

line. No, because to date we have not been far enough along in our project that would permit an intelligent discussion.

If I can answer you now, apart from the movement of gas -- and we talked, just a moment ago, about gas supply, which, after all, is the essential part of your question, I think -- we think that once our project is in being and on the road that the commitments we have in the way of options and what not are going to make it possible for us to assist Trans-Canada in the priority it has in the service of Canada and through the facilities of the Alberta Trunk Line grid, you have a built-in vehicle to permit these exchanges back and forth.

I hope I have correctly interpreted what you were getting at.

THE CHAIRMAN: I realize you are just giving your thinking out loud, as I am trying to do also, on this matter and, therefore, you are not giving factual testimony in that sense.

MR. HORTON: That is correct.

THE CHAIRMAN: But, at first glance, I just wonder whether the protection of the citizens of Canada, in so far as their natural resources, the resource of natural gas, is concerned, would not come about in a good, safe manner if the three systems were interconnected with any export being conditioned on the premise that Canada would have a

priority.

MR. HORTON: Well, it is difficult, it seems to me, to implement that kind of thing precisely. That is to say, I think that Canada has to achieve that priority prospectively, as it were, when we apply to the Conservation Board and to Ottawa and make that determination at that time. It seems to me quite difficult, from an economic sense, to invoke that priority in any retrospective or retroactive manner once the project is in being, and that, of course, is part of our problem.

THE CHAIRMAN: Then have you no confidence in your estimates of reserves?

MR. HORTON: Oh, yes, indeed.

THE CHAIRMAN: I am sure that when everybody gets together on their estimates of reserves and you know what that situation is and, supposing the potential reserves -- the word "reserves" is used in two or three different ways in your brief, but suppose it does not turn out and fifteen years from now, from the point of view of the production of gas that is anticipated (although I have every confidence that it will) but supposing it does not and Canada then has to cut back on what it is exporting, are we not all in trouble then?

MR. HORTON: Yes.

THE CHAIRMAN: Is it not better to face that in advance?

MR. HORTON: That is what I was trying to say.

THE CHAIRMAN: Not by way of refusal of an export permit but by way of giving Canadian citizens first ---

MR. HORTON: I think it could be done. You can do it as you go along, year by year.

THE CHAIRMAN: That is correct.

MR. HORTON: What I would suggest, and I think -- I was going to suggest this if we had the opportunity: I would like to present to the Commission, before you complete your sittings here in Calgary, something in tabular form which I do not think you have on record yet that would show, on a conservative basis, what the reserves are now in Alberta and British Columbia and Saskatchewan, and it would show, in a dramatic way, I think, what this trend significance really is.

You would take conservative trend figures in Alberta and the other two provinces and add that on the next one.

Now, the evidence of Trans-Canada on eastern Canadian requirements is not yet before you, but I presume it will be in and, of course, it will be optimistic. We can take that and add that on a third line, which will be a deduction, and it will show a continuous rolling increase in reserves at all times, with ample protection for

Alberta requirements and the eastern requirements of Canada, which will show this thing building up in a consistent way, and I say when you have that before you, any governmental agency in Canada will be looking at that year by year and at any time this export figure endangers in any way the long-term supply of Alberta and Canada, when we come in for enlargement of capacity you would say, "No, let us shut it off."

THE CHAIRMAN: No, no; not for enlargement. That is not my point. My point is for continuous operation. As you see your reserves going down, the reserves not becoming available as anticipated, you can see that three or four or five years ahead, whatever the engineers and economists would say. I am not thinking in terms of cutting off next week, for anybody. I am thinking in terms of protection of the Canadian consumer. We can always ship you oil.

MR. HORTON: I know.

I think the answer to any suggestion of a prediction such as yours will be for the Canadian market as a whole is what we have undertaken to do for Alberta. It does not depend on our faith in the trends but the simple judgment that you could not finance it. If we had to hold an umbrella over the whole of Canada during the ten years of that permit ---

THE CHAIRMAN: My understanding of financing is -- and you can tell me; Mr. Christensen can tell me, because I may be crazy on it -- but you have to give a certificate to the trustee, don't you, under your trust deed, on the availability of your reserves and resources of gas or whatever the trustee calls them and, if it shows your supplies are going down faster than the sinking fund is going to pay out the money secured by the deed, then you are under covenant to step up the demand.

MR. CHRISTENSEN: I still do not feel, sir, that, as a practical matter under those conditions, you would be able to finance a project, because there must be a continuity of adequate reserves to support the payment of the debt securities over the life of the permit and, if you have a situation where that may be cut off at any time, you would have great difficulty, if you would be able to do it at all, in financing, in my opinion.

THE CHAIRMAN: I do not think one could work it out by way of cutting off at any sudden point, but you might taper down over a five or ten-year period.

MR. CHRISTENSEN: Normally, to finance these projects, you have to have a rather conservative schedule of debt payment to begin with,

probably a little more onerous than you might reasonably expect you should, but there is already a protection built into it; and to step that up or put other impediments into it would make it virtually impossible to finance.

THE CHAIRMAN: I wonder whether something could not be worked out. We are seeking guidance, not trying to impose a theory.

MR. CHRISTENSEN: I don't think that has ever been done, sir.

THE CHAIRMAN: No harm in trying.

Well, I do not want to waste time but I thought, while Mr. Black and Mr. Bechtel were here, you might have an opportunity to discuss it with them and tell us how impractical the idea is.

MR. MacKIMMIE: Mr. Black is not sworn, sir, but I am sure, if you would be interested in the benefit of his views, he would be willing to speak.

THE CHAIRMAN: I certainly would be interested in having the benefit of his views. I should say that this is not the Commission's view. As a matter of fact, I had this thought just as I was sitting here this morning.

MR. JAMES BLACK: Mr. Chairman and gentlemen, if I understand your inquiry, it rather falls into two parts: one as to whether there could not or could be some sort of working agreement

as between the Westcoast operations coming down to Northern Alberta and through into Columbia and following the present route; and another operation along the foothill area, which is currently projected, to the Athabaskan River, which might well be projected further north, in future years; and the Trans-Canada operation to the east, and the broken line on the map as a transporting medium between all three of them in the centre.

That, to me, is a very practical operation, and I think it would have great economic benefits.

The second part of the question, as to whether that sort of an arrangement could not be worked out at this time, brings up some problems. You cannot finance a project, in my opinion, such as we have here, without having quite firm commitments for a minimum amount of gas, such as the 450 million. Now, once that is on the road, then these other arrangements -- and the same thing has been true of Trans-Canada -- could be worked out for mutual assistance and help through the medium of the trunk system.

Now, you ask about the possibilities of declining deliveries. Let us take the 450 million feet. If there was any such provision it would have to be, of course, in the indenture at the beginning. I cannot conceive of financing a project which did not give a firm schedule of

deliveries, subject to the accuracy of our estimates of reserves and the usual hazards that come with this project, for, let us say, X years.

Now, if we knew, in the next X plus five years, that there might be some question about delivery during that period, if we were satisfied that the deliveries might be cut down to a minimum but not cut down ---

THE CHAIRMAN: Not cut out?

MR. BLACK: Not discontinued; you would have to have a minimum, but at that time we would step up our rate structures and our financing in such a way as to contemplate that that sort of thing was going to happen. If it didn't happen, we would readjust our rate structures on the basis of what our successors would know at that time.

If it did happen, we would have collected from our customers, over the entire period, in the course of such restrictions, the amount which would be necessary to provide the reimbursement for the use of the facilities which had been constructed.

The net result would be, of course, an increase in cost as against a firm commitment for X years plus five. How much that increase would be I don't know. Whether it would price the project out of the market, I do not know. I think we would have to do quite a little figuring on it.

But I would not say that some such formula

might not be devised; but I am sure that the costs would be increased quite materially and I fear somewhat the effect of the comparative costs in California with other sources.

THE CHAIRMAN: You mean the costs would increase because of the possible decline in deliveries during, let us say, the last five years?

MR. BLACK: That is correct, because we would have to recognize that in our rates that we charged, and our security owners, I am sure, would insist on recognizing that that decrease would occur, because there is no other way that we would get the money necessary to provide for the waste and use of the facilities if it did occur except during that first period of X years, and we must get that from the customers who are using the gas during that period; you could not get it -- it would not be practical, in my opinion, to try to get it from the then customers during the X plus five years. I do not think you could do it that way.

THE CHAIRMAN: Excuse me, Mr. Black. Mr. Frawley, are these permits given on a 20 or 25-year basis?

MR. FRAWLEY: Do you mean by the Conservation Board?

THE CHAIRMAN: Yes.

MR. FRAWLEY: 20 years, I think -- generally, 25.

THE CHAIRMAN: You see, a permit is on a 25-year basis. Your earning term of financing of a funded debt in your country, as I understand it -- please correct me if I am wrong -- is 20 years. If it were along those lines it would not increase the cost.

MR. BLACK: That is the debt, but there is a 25 per cent equity in here that must be recovered.

THE CHAIRMAN: Surely, equity can take that chance.

MR. BLACK: We are taking a chance.

THE CHAIRMAN: It would connect the San Juan basin with Montreal.

MR. BLACK: Correct, in a most economic and, I think, the best way.

THE CHAIRMAN: Mr. Black, I should get on the record that you are the chairman of the Board of the Pacific Gas and Electric Company.

MR. BLACK: I am.

THE CHAIRMAN: Thank you. Perhaps I have taken up too much time, but thank you very much, Mr. Black.

Gentlemen, this is Saturday and I do not think the Commission feels like sitting this afternoon; that is, they do not feel, physically, able to do it.

We will adjourn until Monday morning at 9.45 A.M., and with the agreement of counsel we will resume with Alberta and Southern at 9.45 A.M. on Monday morning in this auditorium.

---Whereupon the hearing adjourned at 12.45 P.M., February 15, until Monday, February 17, 1958, at 9.45 A.M.

- - - -

Mr. Borden

ROYAL COMMISSION

ON

ENERGY

HEARINGS

HELD AT

CALGARY,

ALTA.

VOLUME No.: 11

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C O R R I G E N D U M

In Volume 10 at page 1440, the figure "1 1/3" in line 2 should read "1 3/4".

In Volume 10 at page 1470, the answer commencing at line 22 should read:

"MR. HORTON: Half from El Paso, "25 per cent from Alberta and the "balance from California produced "gas. This is a rough approxi- "mation."

ROYAL COMMISSION

ON

ENERGY

Hearings held at Calgary,
commencing Monday, February
3, 1958, at 10.00 A.M.

PRESENT:

Mr. H. Borden, C.M.G., Q.C.	--	Chairman
Mr. J.L. Levesque,	--	Member
Mr. G.E. Britnell,	--	Member
Mr. G.G. Cushing,	--	Member
Mr. R.D. Howland,	--	Member
Mr. L.J. Ladner, Q.C.	--	Member
Dr. R.M. Hardy,	--	Member

COMMISSION COUNSEL:

Mr. A.S. Pattillo, Q.C.

Mr. Miles H. Patterson.

Mr. J.F. Parkinson -- Secretary to the Commission.

Major N. Lafrance -- Assistant Secretary to the Commission.

APPEARANCES:

Representing Alberta and Southern Gas Co. Ltd.:

Mr. R.A. MacKimmie	-	Counsel
Mr. J.K. Horton	-	President of Alberta and Southern Gas Co. Ltd.
Mr. J.S. Moulton	-	Vice-President and Executive Engineer, Pacific Gas and Electric Company

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EXHIBITS		Page
C-17-1, 2, 3, 4, 5, 6	Volumes Nos. 1-6 filed with the Oil & Gas Conservation Board of Alberta by Alberta and Southern	1529

Monday,
February 17, 1958.

---Upon resuming at 9.45 a. m.

THE CHAIRMAN: Gentlemen, the Commission will resume its hearing.

MR. PATTILLO: Mr. Chairman, I understand that before counsel continues with the Alberta and Southern submission, you have a few questions which you wish to ask.

THE CHAIRMAN: That is right, Mr.Pattillo. Is Mr. Christensen here or has he gone back?

MR. HORTON: He has returned, Mr.Chairman.

THE CHAIRMAN: I wanted to ask, and perhaps you can help us, Mr. Horton: would you mind telling the Commission what regulatory bodies the transmission company, which is P.G.T., the Pacific Gas Transmission, when it gives the gas at the Canadian-U.S. border and the border of Oregon and California -- is that right?

MR. HORTON: That is correct, the Pacific Gas Transmission.

THE CHAIRMAN: Would you mind telling the Commission what regulatory bodies that company would be subjected to in the United States?

MR. HORTON: That company would be regulated by the Federal Power Commission with respect to the rates it charges Pacific Gas and Electric

Company for the gas resold at the California-Oregon border.

THE CHAIRMAN: Is that the only regulatory body?

MR. HORTON: Pardon?

THE CHAIRMAN: Is that the only regulatory body, the F.P.C.?

MR. HORTON: No. With respect to public offerings of its securities, it would be regulated by the United States Securities and Exchange Commission.

THE CHAIRMAN: But, from the point of view of rates, it would be wholly the F.P.C.?

MR. HORTON: That is my understanding, sir.

THE CHAIRMAN: Is that because it goes between two States?

MR. HORTON: Yes, sir.

THE CHAIRMAN: If it were in just one State, would it be under the F.P.C.?

MR. HORTON: No, unless it was handling the gas moving in interstate commerce, under certain conditions; but because this company is carrying gas in interstate commerce, passing through the States of Idaho, Washington and Oregon, that is the prime reason it is regulated by the Federal Power Commission.

THE CHAIRMAN: And then, when the gas gets to the border of California the amount which P.G.T.

is permitted to charge to Pacific Gas and Electric, the distributor in California, would depend upon the rate base established by and the rate of return allowed by the F.P.C.?

MR. HORTON: That is correct; and, of course, review by that body of all cost elements that would otherwise go into the cost of service being rendered.

THE CHAIRMAN: Quite; I understand that.

Then how, in general, would the F.P.C. establish that rate base?

MR. HORTON: In general, it would require us to assume the burden of proof of showing to them the actual legitimate original cost of the facilities that are employed for rendering that service.

THE CHAIRMAN: Let me ask you a further question, if I may. I am trying to get some enlightenment of some problems I think we have to face in Canada; at least, the Commission is charged with the responsibility of recommending certain things.

Is there any general pattern, in the United States, with respect to the financial structure of gas pipeline corporations?

MR. HORTON: Speaking very generally, sir, I would say that to the extent a pattern exists, in the first place, debt securities have, in the case of pipeline companies, normally been

a larger percentage of their capital structure than would occur in the case of an ordinary gas or electric distributing company, so that, again speaking in terms of a pattern, the amount of debt in the capital structure has normally been termed to be in the range of 70 to 75 per cent or, in some cases, even higher; and the balance is, of course, handled by equity securities.

I am not sure ---

THE CHAIRMAN: Yes, that is getting along the line of what I want to find out.

Let me put it to you this way: in the case of electrical utilities, the pattern, by and large, in your country, and I think in the North American Continent, is roughly 50-50, is it not, a sort of 50 per cent funded debt and 50 per cent equity?

MR. HORTON: In that general range.

THE CHAIRMAN: In some type of utilities, the percentage is greater, sometimes being 40 per cent funded debt and 60 per cent equity?

MR. HORTON: That does occur.

THE CHAIRMAN: And that is so, I think, largely in our country. Now, is there any reason why your percentages are so different in the case of a gas pipeline company?

MR. HORTON: I think, probably, the primary reason is that in the case of pipeline companies, in

the first place the institutional investors that lend that amount of money have been willing to lend it on a basis that involves a capital structure with that high proportion of debt, and the reason for that, as I understand it, Mr. Chairman, is that in these pipeline companies they have pretty much an assurance that the money which they lend in the way of debt securities is going to be paid off.

They get that assurance because they satisfy themselves, in the first instance, that the contracts and the supply is there at the inlet end of the pipeline and that the contracts to purchase and to use the supply are there on a permanent basis at the outlet end of the pipeline and, having those two fixed considerations before them, they can see for themselves that the money they finance in the way of debt will be financed over whatever period is involved, which is pretty much of a sure thing in so far as getting their money back is concerned, and that, after all, is all they are interested in.

THE CHAIRMAN: In other words, assuming the gas is available and the project is properly managed and administered, there is not a great deal of risk?

MR. HORTON: That is correct.

THE CHAIRMAN: I notice, in your application, and it came out in evidence before the Commission on Saturday, that you propose for this company

75 per cent debt structure, funded debt, and 25 per cent equity?

MR. HORTON: That is right.

THE CHAIRMAN: Will you tell the Commission whether there is any advantage or disadvantage to the consumer in the ratio of funded debt to equity?

MR. HORTON: Well, we think there is, in that the debt or mortgage money is the cheapest cost of capital that you have in your financial structure and, since cost of money is one of our costs of the pipeline project, to the extent that you can keep that cost of money low and still be flexible and conservative and safe in doing so, in the long run I believe you would permit lower cost of pipeline operation and that accrues, in part, to the benefit of the consumer.

THE CHAIRMAN: Would you not go further than that and would you not say that if you have this rate base, the rate base surely permits you to charge an amount which will provide you depreciation?

MR. HORTON: That is correct.

THE CHAIRMAN: At what rate, approximately, is depreciation customarily charged or taken by these gas line companies or permitted by the F.P.C.?

MR. HORTON: It will normally be related to the life of the permit or the life of the

gas purchase contracts, so that if you had an assured supply from your permit or certificate of, let us say, 20 years, you would not be safe in depreciating those facilities over a longer period.

THE CHAIRMAN: Well, then, you mean you would be allowed to charge your full depreciation over a period of 20 years if your permit from Canada were, let us say, for a period of 20 years only?

MR. HORTON: I understand that we have set it up in our contract that the pipeline facilities would be depreciated over the life of the permit, which we understand would normally be 25 years.

THE CHAIRMAN: Well, whether it is 20 or 25 years, that is a pretty rapid depreciation, is it not? There may be a reason for it. I am not quarrelling with you, but it is a pretty rapid depreciation?

MR. HORTON: In terms of the actual physical life of the facilities, it could be.

THE CHAIRMAN: That is what I mean.

MR. HORTON: But you could have depreciation as a cost of doing business and, as you know, you have to be sure that you get it back in terms of rates from your customers within the only period that is safe at the outset.

THE CHAIRMAN: Then, presumably, also included in the rate base would be your amortization payments for your funded debt and your interest on

your debt?

MR. HORTON: Well, provision would have to be made for that.

THE CHAIRMAN: Yes, but your rate charged to P.G. and E., or whoever your customer is at the other end of your line, would provide sufficient to take care of sinking fund and interest on the debt?

MR. HORTON: Yes, sir.

THE CHAIRMAN: And, as that debt decreased, the rate to the consumer would be lower, would it not?

MR. HORTON: I think the answer to your question, Mr. Chairman, would be that as you amortize the debt and facilities, of course, your rate base would decline, and in so far as that element of the rate-making process is concerned, your statement is correct.

THE CHAIRMAN: Certainly; so the consumer gets the benefit of the declining annual charges for sinking fund and interest?

MR. HORTON: I think that is correct.

THE CHAIRMAN: So at the end of the 20-year period, or as time goes on, your equity becomes more valuable, does it not?

MR. HORTON: Other things being equal.

THE CHAIRMAN: Other things being equal, yes, so that actually, in putting a high 75 per cent

proportionate debt and a 25 per cent proportionate equity and accruing that 50 per cent, is it not, or 25 per cent, the 25 per cent of the equity that would be given to Canadian investors for first refusal is to their advantage?

MR. HORTON: Yes, indeed.

THE CHAIRMAN: Am I not correct in that?

MR. HORTON: Yes.

THE CHAIRMAN: And distinctly to their advantage?

MR. HORTON: I think so.

THE CHAIRMAN: And far more so than just an investment in the senior securities?

MR. HORTON: That's right.

THE CHAIRMAN: And, in the meantime, the consumer in California is making that equity more valuable, year by year?

MR. HORTON: I think that is a fair statement.

THE CHAIRMAN: Then let us get to one other question I have in my mind and you and Mr. Black can decide which one would care to answer this question:

There is, in the Western United States, mostly in the States, particularly, according to the evidence put before us last week, a tremendously increasing demand for gas, natural gas, as a fuel.

MR. HORTON: Yes, sir.

THE CHAIRMAN: And this Commission is concious, I think, of the fact that we have been told and we have read, hurry up, hurry up, hurry up, the markets in the United States are going to be lost to Canada, and so on. Would you, or Mr. Black, care to venture an opinion as to whether or not that is really sound? If that demand for gas is increasing at this rapid rate, then as reserves are discovered in our country surplus to Canadian requirements, on whatever formula one finally settles, are not these markets at that time in years to come going to be valuable to the Canadian producer of natural gas. The Commission would appreciate an expression of view on that.

MR. HORTON: I will be glad to start it, Mr. Chairman, and if Mr. Black wants to answer or add to my remarks, he will do so.

I would say it is a very difficult question to answer. The need for gas, underscored in California and the Western States, is great and growing, and I do not think it would be fair to say if Canada desires to defer for some period of years seeking a market outlet in California that you

could be absolutely sure that other lines of import into California would not be established. We have to supply our customers in one way or another and I would say my view of the present situation is that we have selected Alberta as our choice for augmenting those supplies because it is the largest area of surplus gas, as we see it, within economic reach of a high load factor direct line, possibly, to solve our problem, and that is our first choice for that and a number of reasons that we have indicated.

Now, if you have to have bread to feed your family, you first try to get the best quality at the cheapest price in quantities you need for the mouths you need to feed at location A, but if you cannot do that and they are still going hungry, then, maybe, you have to pay more and take your bread from location B on some basis that might not be quite so satisfactory. So I say to you, that answer, in my judgment, cannot be a precise one, but I would not want to say those American markets we are talking about will always be there in that form. Some years down the road, if I recall Mr. Kayser's statement, the gist of it to this Commission was that gas should move in the most economical channels that are available to it, and we think this is just that sort of channel, and if that cannot be done, for reasons of policy in Alberta or

[illegible]

[illegible]

Canada, then we would have to turn, perhaps, to some less economic channels to provide our bread, as it were.

THE CHAIRMAN: But as your family grows, Mr. Horton, in the natural course of events, will you not want -- and that is the evidence before us up to date -- increasing and increasing quantities of gas will be needed.

MR. HORTON: Yes, sir.

THE CHAIRMAN: So you might, even though you had taken it from a less economic source to fill an immediately requirement, you would still come back to the more economic source when it was available, would you not?

MR. HORTON: That is so, but what I am trying to say is, if we hook up to a less economic channel in the United States, then engagements, as you all know, have to be for long periods of time, and you add to that fact the fact that reserves are increasing in the United States rather steadily each year, which does prompt me to say you cannot be sure we would not have positioned ourselves, speaking just for my own company, in some other way.

THE CHAIRMAN: I realize this is a very difficult question, as you said at the start, but the difficulty does not just lie on your side.

MR. HORTON: No, sir, I appreciate that.

THE CHAIRMAN: Thank you very much.

MR. PATTERSON: If it please the Commission, I would like to direct some attention to the matter of reserves and contracts which are described commencing at page 10 of the submission, and in exploring the matters considered, I find that it was of considerable assistance to have as background material the volumes filed with the Oil and Gas Conservation Board by Alberta and Southern, and I suggest, therefore, that those volumes, of which there are six, become an exhibit and, perhaps, if I might take a moment I might direct the Commission's attention to certain aspects there that might be of assistance.

This is the 17th. I suggest that since these volumes themselves are numbered 1 to 6 and they have alphabetical tabs, that they be numbered Exhibit C-17-1, 2, 3, 4, 5 and 6.

---EXHIBIT No. C-17-1, 2, 3, 4, 5, 6 : Volumed Nos. 1-6 filed with the Oil & Gas Conservation Board of Alberta by Alberta and Southern.

THE CHAIRMAN: I think we just have the one copy of each of these, Mr. Patterson.

MR. PATTERSON: At the moment we just have one for this part, sir, and we will make arrangements for distribution of the others to the

[illegible]

members of the Commission.

MR. HORTON: Mr. Chairman, there are one or two corrections in Saturday's record that I would like to offer, if I may, if this is the appropriate time.

THE CHAIRMAN: This is the time to do it.

MR. HORTON: On transcript page 1440 in the second line, the numbers 1 1/3 should properly be 1 3/4. I am speaking there of the net increase in reserves trend in each year and, I believe, I have consistently used 1 3/4 and the 1 1/3 is an error.

On transcript page 1470, Mr. Frawley was examining me with respect to the percentage of our gas used in California that would be occupied by the gas to be exported from Alberta, and in that connection, I believe, he did ask me whether the balance was to come from El Paso, and the answer, as it appears, seven lines from the bottom of the page is somewhat confusing and it should be in this manner:

> "MR. HORTON: Half from El Paso, 25 per
> "cent from Alberta and the balance from
> "California produced gas. This is a
> "rough approximation."

I offer those corrections for the record.

THE CHAIRMAN: Thank you very much, Mr. Horton.

MR. PATTERSON: Mr. Horton, for the record, would you introduce now the gentleman you have with you with regard to these reserves and contracts?

MR. HORTON: Mr. J. Milton Wege, with respect to the matter of reserves.

J. MILTON WEGE, previously sworn.

BY MR. PATTERSON:

Q. Mr. Wege, I understand you are a member of the firm of Ralph Davis?

A. Ralph E. Davis.

Q. Will you tell us something about Ralph E. Davis, the firm and the man, too?

A. Mr. Davis has been engaged in consulting work in connection with oil and gas problems since, approximately, 1920. The largest portion of his work has had to do with the evaluation of gas reserves. In the course of that long experience in the evaluation of gas reserves, Mr. Davis and, to an extent, the people working under him have had occasion to study the gas reserves of the United States and Canada; practically all of the gas-producing provinces of both countries. We have made studies in connection with the financing of gas projects, and in connection with the securities or registration statements for the Securities &

[illegible]

Exchange Commission, and in connection with loans and the issuance of capital stock of transmission companies. In connection with rate matters for regulatory bodies, we have made studies of gas reserves, their availability to markets; the storage problems where that be an issue.

Q. And your own qualifications, sir?

A. I am a graduate of the Canadian Institute of Technology with the degree of Bachelor of Science in chemical engineering. I graduated in 1932 and had a year of graduate work at the same school. Following the completion of my formal education I was employed, for some time, in oil refineries and in oil core testing laboratories. In 1938 I went with Mr. Davis, and since that time have been employed by him as an assistant in the evaluation of oil and gas reserves.

MR. WEGE: Yes. In the course of these studies I have had occasion to make investigation of reserves in most of the gas provinces in the United States as well as in Western and Eastern Canada.

MR. PATTERSON: Q. A minor matter first -- I notice in Figure A to the submission mention is made of reserves at Paddle River amounting to proven and probable of 66 billion cubic feet of gas. I think that in the volumes of figures filed as an exhibit there is no detail of calculation of these reserves. Is that right?

MR. WEGE: That is correct.

Q. Have you information that is available to the Commission in regard to that?

MR. WEGE: Yes, we have a report of Paddle River which was prepared subsequent to the preparation of Volume 4-A which contained our estimates of reserves in certain fields which we were requested to study afor Alberta and Southern. This report can be made available.

MR. PATTERSON: If we might at some time file that just to complete these others ---

MR. MacKIMMIE: I think Dr.Sproule has it but I don't think it has been produced.

MR. PATTERSON: Perhaps we can get it, at a later time when it has been produced. Thank you.

Q. Coming to Table A in your submission you show there the total remaining reserves in the field in the contract to Alberta and Southern as being 4.799 trillion cubic feet of proven and probable reserves. Is that correct?

MR. WEGE: Yes.

Q. In connection with those fields I am advised that the Conservation Board figures are approximately 2.884 trillion cubic feet of proven reserves. Now, in that, just as a side note they estimate I believe Waterton Castle River but in order to round out the question I am bringing to your attention we are simply taking your figures for that.

Can you give us an opinion as to why these estimates of the same reserves are so widely different, one being for proven and probable and the other for proven reserves only?

MR. WEGE: One difficulty I might have in answering your question would be that I do not know the details of the Conservation Board estimates. However, a portion of the difference may well be explained by our inclusion of a probable reserve which may well be in excess of what the Board included, as I think you said of proved reserves.

Q. Do you understand the term proved as used by the Board as distinct from your proven and probable?

MR. WEGE: I understand that the Board uses the word "disposable" gas and defines disposable gas as the proved reserves plus in some cases at least a portion of the reserves which they considered probable and apparently, as I understand it, a portion of the total reserves that they included in disposable reserves is not a constant variation but is a matter of judgment.

Q. Now, another term that we have had here for describing reserves has been the word "marketable" reserves. In these estimates that you have that your firm has made am I to take it that you consider all of the reserves of approximately 4.8 trillion cubic feet to be marketable?

MR. WEGE: Yes. These reserves are after allowing for estimated field use, field requirements and shrinkage loss and are volumes which we expect would be available for purchase by a pipeline company.

Q. Over the entire life of those reserves?

MR. WEGE: Yes.

Q. In making these estimates was detailed seismic and structural information available to you on the various fields made available through the companies under contract?

MR. WEGE: In some cases seismic information was made available to us. That was not

available to us in all the cases of the field study.

Q. It might be of some interest to have your comment as to the accuracy of these reserves in regard to the matter of contract and pipeline financing purposes. Is it on this type of study that you would anticipate financing would be given or would there have to be some further conservative reduction?

MR. WEGE: The financing would be to a great extent dependent on proved reserves. I don't think there would necessarily have to be reduction of the proved reserves but the probable reserves would not be given the same weight as the proved reserves. However, by the time this project arrives at the stage for financing it is anticipated that additional development and exploration within these areas will result in enabling us to classify a substantially larger part of these reserves as proved reserves.

Q. Now, is it correct to say that all the fields under contract and under option involve a gas that must be processed with the resultant substantial production of LPG, sulphur and other by-products.

MR. WEGE: I believe that is correct. There may be minor amounts of the gas which would not require processing but it would be included -- I think that every field would have to be processed.

Q. From the size of the project would it be fair to say that large amounts of LPG and related products would be produced?

MR. WEGE: I think substantial amounts of it. I have made no study of that.

Q. You haven't, Alberta and Southern nor your company has not made any estimate of the likely production of the by-products to be produced under these contracts?

MR. WEGE: We have -- our firm has made no study of the by-products which will result from the production of these volumes of gas.

Q. Mr. Horton, are you in a position to assist me in regard to what may be the situation with respect to by-products?

MR. HORTON: Generally speaking, Mr. Patterson, we have not made any overall detailed studies of that kind for the reason that, as you know, in the normal case we would expect to purchase our gas requirements under the standard form of contract which is in the submissions, which is re-treating plant, and our schedule was set up on that basis, that we are buying that kind of gas and so when it reaches us under those circumstances the by-products and the sulphur have been removed by the producer himself.

Q. I have in mind, Mr. Horton, that the Westcoast submission did give us some indication

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[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

from Jefferson Lake Sulphur as to what they were going to do in regard to this problem.

I take it you have left this aspect of the problem to the producers to resolve for themselves?

MR. HORTON: That, generally speaking, is correct.

Q. Now, from the figures that you have given us it appears that company seeks to export about 4.2 trillion cubic feet over a 5-year period?

MR. HORTON: That is correct.

Q. I think it is safe to say from Mr. Davies' report and from other submissions that the area covered by this proposed pipeline is very fruitful territory for the future?

MR. HORTON: There seems to be no question about it.

Q. Under the circumstances the parties under contract now may prove up much more gas as development proceeds?

MR. HORTON: That is our hope and actually our judgment.

Q. Perhaps much more than you can handle under your contract?

MR. HORTON: Not more than we can handle, our firm contracts that we have signed to date but more may be offered to us under these option

agreements than we could digest at the time.

Q. Then to what extent are these additional reserves that, as you say, you may not be able to digest at the time, tied to Alberta and Southern, for what period, if any? You know what I am getting at. I have briefly reviewed this vast volume. If you could summarize that, the method used in these contracts for taking care of that problem, I would appreciate it.

MR. HORTON: I will try as best I can to give you the general picture of that situation as I see it.

You should keep in mind first of all that we have not only the supply problem for our export project but the supply problem to the Alberta utilities under the firm agreement we have entered into with them and that situation is a difficult one from the standpoint of contracts for gas, from the time standpoint, that is to say. We can go out now today and we have done so and make firm commitments for the volumes of gas that are required to support our export of 450 million feet a day. We can say to you as a producer if you happen to have that total quantity that we will contract for that on a 90 per cent total basis and over a period of years subject to obtaining the necessary approval. On the other hand we have the situation under the agreement with the operating utilities where in the initial years the project requirements are not available for five, ten, fifteen years

hence. That is one of the reasons that we have signed up these option agreements of which you speak and as gas is developed by the purchasers under the options and offered to us in these next few years it would be our plan to first see the extent to which we can then go firm on that commitment in the light of discussions with the gas utilities and their needs.

Secondly, see what the additional requirements are in California and possibly apply for an enlargement of our export project if it was demonstrated that the gas then being offered to us was surplus to needs here, and then if there was no demand for that gas at that time it would need to be committed to us under the option agreement. In other words, these options run from five to ten years in varying cases, and we either have to go firm and buy it or the producer would release it.

That is a fairly general answer to your question. I think that is what youaare getting at.

Q. That is all right as a background. You say when the gas is offered to you you must go firm or the gas is released to others?

MR. HORTON: Yes, within a reasonable period.

Q. Within what period?

MR. HORTON: I would like to ask Mr.

Moulton to answer that question if I may.

---James S. Moulton, previously sworn

MR. PATTERSON: Q. Can we introduce you now to the record in regard to this contract problem?

MR. MOULTON: Yes. My name is James S. Moulton. I am Vice-President and Executive Engineer of the Pacific Gas and Electric Company and Director and Vice-president of Alberta and Southern Gas Company Limited.

Q. Will you perhaps give me the answer to the question I directed Mr. Horton? That is, for what period -- put it this way: For what period of time does Alberta and Southern have from the time gas is offered to it under the option contracts mentioned in your submission in order to decide whether or not it will take the offer or let the producer free of the option to deal with other persons?

MR. MOULTON: There is some variation in the various options but generally speaking if the gas is offered to Alberta and Southern we have a limited time to examine the offer to decide whether or not that gas is there in what we regard as commercial quantities and within economic distance of our transmission line and to negotiate a firm contract for the purchase of that gas

subject to obtaining the export permit from the Alberta Conservation Board within, I believe, a period of eighteen months from the date of the contract and the obtaining of the necessary permits, both those in Canada and in the United States, within 24 months.

Q. In the case of additional reserves or the reserves in fields where you now have firm contracts what is the situation?

MR. MOULTON: The same.

Q. The same. In other words, if a company which has now entered into a contract to deliver for example 50 million cubic feet a day finds that it is in a position to deliver 150 million cubic feet a day you have a similar option to take that up, if you wish, and you have a similar period of time in which to take it up?

MR. MOULTON: That is not exactly correct, Mr. Patterson. The form of firm contract which we have other than Pembina gas, which is an oil field gas, provides that the initial contract quantity is geared to the estimate of the recoverable reserves. The contract provides -- you want me to give you exact dates I had better refer to the form of contract. If you want only the principle I can tell you that.

Q. The principle is sufficient.

MR. MOULTON: The principle is this,

if the producer selling us gas in developing reserves to pick up that contract finds that there are larger reserves than contemplated in the initial contract quantity, if these reserves exceed the original quantity by not less than 25 per cent Alberta and Southern, subject to obtaining all required permits within the defined amount of time, not only has the right but the obligation to increase the daily contract quantity by 25 per cent commencing about a year after the initial quantity becomes deliverable and if reserves of at least 50 per cent additional are found then Alberta and Southern commencing two years after the initial delivery starts is obligated to take the 50 per cent increase in contract quantity. Then the contract goes on to provide that from time to time there will be a review of the reserves and the deliverability which the producer has under the contract, and if he falls below those required to live up to the contract he has an obligation within what he regards as the economic limits of development to endeavour to build back reserves on deliverability of both but that if he fails to do so then the daily contract quantity is reduced.

Q. What happens to price in regard to these amounts that -- for example, the 25 per cent that the producer may require you to take? Is that simply picked up at the time or at the

price effective at the time of the request by the producer or is there provision for reviewing the matter of price on that occasion?

MR. MOULTON: It is the same contract price. I don't know -- as Mr. Horton in his submission gave the detail of that contract price which you may consider?

Q. Yes, please.

MR. MOULTON: The submission on page 11 refers to producers other than for the Pembina oil field gas commences at 13½ cents per thousand cubic feet and gives a very brief resume of the changes subsequent to the initial price. In greater detail the initial price of 13½ cents and then to deliveries made up to July 30th, 1961. Then for the 12-months' period commencing July 1, 1961, and ending June 20, 1962, the price is 14.5 cents. Over the next 12-months' period commencing July 1, 1962, the price is 15.25 cents. For the 12 months commencing July 1, 1963, it is 15.75 cents. For the 12 months commencing July 1, 1964, it is 16.25 cents. For the 12 months commencing July 1, 1965, it is 16. 5 cents. For the 12 months commencing July 1, 1966, it is 16.75 cents. For the 12 months ---

MR.HELMAN: 16.5 -- is that correct?

MR. MOULTON: For the 12 months commencing July 1, 1966, it is 16.75 cents.

MR. HELMAN: Yes, but the one before that?

MR. MOULTON: 16.5.

MR. HELMAN: That was a drop from the previous one which was 16.25 or is it just a quarter of a cent?

MR. MOULTON: An increase of one quarter of a cent.

MR. HELMAN: I see.

MR. MOULTON: For the 12 months commencing July 1, 1967 it is 17 cents. Then the base price for the next five years commencing July 1, 1968, and extending to June 30, 1973, is 17.25 cents, but that price is subject to re-negotiation with the producer as is the price for each of the subsequent 5-year periods.

The contract provides that the re-negotiated net price will in no case be less than the base price stated in the contract. That price, as I stated, for the 5 years commencing July 1, 1968, is 17.25 cents; for the 5 years commencing July 1, 1973, it is 18.5; for the 5 years commencing July 1, 1978, it is 19.75; and for the period commencing July 1, 1983, and continuing to the end of the contract it is 21 cents.

Q. Thank you, sir. Is there a provision for earlier release of a seller by mutual agreement in less than the option period

you mentioned?

MR. MOULTON: Mr. Patterson, my counsel advises me that by mutual agreement anything can be done in changing a contract.

Q. What opportunities do you consider have been left under this method of tying up development, both from your present contracts and by your options, for other pipelines to enter this Foothills area?

MR. MOULTON: In so far as these pipelines will be used to supply the Alberta market of course it is fully covered by the agreement between Alberta and Southern and the two local utilities.

Q. Yes.

MR. MOULTON: As to pipelines that might serve Eastern Canada such as Trans-Canada we have limited the areas in which we have such options to the Foothills belt, the line running generally north and south between Calgary and Edmonton and extending west from that. It has been my information that up to the present time at least all of the Trans-Canada contracts except for Pincher Creek have been from fields east of that line. We are perfectly well aware of the policy in Canada of very naturally wanting to look to the needs of Canada before granting an export permit and I feel perfectly sure that -- in fact we spell it out in the contracts covering all these options --

that if we do not get export permits the gas is released and will become available to pipelines that can negotiate for it and produce and use it in supplying the Canadian market.

Q. Turning back, perhaps, to the matter of these by-products for a moment, can you assist us with some of these problems: in the event that production of the by-products or any or all of them from the gas delivered to you creates a glut on the market, can the treating and production costs be charged against gas production and still allow the drilling and production of gas to be a profitable venture? Have you given consideration to that problem which may face you?

MR. HORTON: Answering in a general way and based upon the discussions we have had with producers generally, I cannot be specific about it but it is our judgment that the value of the gas, after cleaning and processing, in the light of the prices that we have offered, is high enough and practical enough that there will not be any burden on the producer that will prevent him from performing the obligation under this contract and that, taking the very worst situation that might result, if you could not find a home for this excess sulphur supply that may build up in initial years, if you could not find a place for that immediately, that would not be a financial burden or impediment to going ahead with the production and development and certainly would not impinge on the financial feasibility of our project, which is the thing we are looking to primarily.

Q. Taking the situation in regard to the LPG's, would it not be possible that there might be a flooding of the LPG market by one or more of these large companies you are contracting with in Alberta?

MR. HORTON: Well, "flooding" is a fairly large term. I wouldn't think that they would anticipate that possibility, otherwise you would think they would not be willing to undertake these commitments.

When a producer agrees to sell us, say, 100 hundred thousand million feet a day at the outlet of a treating plant at a given price for a specified number of years, they must have done some soul searching among themselves to satisfy themselves they can undertake that commitment and find a home for these products on an economical basis.

Q. Can you comment on a probable future market for these by-products, either in Canada or in the United States?

MR. HORTON: I don't think we are really qualified to do that, Mr. Patterson. I would be glad to help if I could but I would think some of the producing companies or the C.P.A. would be much more qualified to deal with that question than we are.

Q. Let me put it to you limited to your

San Francisco operations. Have you any knowledge of that area peculiar to yourselves as a result of doing business there?

MR. MOULTON: Mr. Patterson, I think perhaps that in our California purchases of gas we are quite spoiled. There is practically no sulphur gas in California. As a result, we have not counted in any way ---

MR. PATTILLO: It is just like the sunshine.

MR. MOULTON: In the oilfied gas that we buy, the producers have their own treating and extraction plants and they never seemed to be troubled with the disposal of the by-products, so our experience is limited to the purchase of pipeline gas, which does not require further treatment on our part to make it marketable or involve us except in a very slight degree in the sale of a relatively few barrels of condensate back to the refiners that we pick up, perhaps, in our lines.

MR. PATTERSON: Q. Can you assist us, turning to this contracts matter, in regard to what you are buying gas for from these California producers that you speak of?

MR. MOULTON: Our prices on gas paid in California have trended sharply upward since 1930 when we first, with very minor exceptions, substituted natural gas for manufactured gas in our

territory. It might be of interest to you and to the Commission that in 1930 our average price of gas was approximately 6.7¢ per thousand, while in 1957 the California purchased gas was about 32.6¢.

MR.PATTERSON: Thank you.

MR. COMMISSIONER HOWLAND: Is this field price?

MR. MOULTON: This is field price, delivered into our gathering price either at the wellhead, if it is gas not requiring processing through a plant, or at the outlet of a treating and processing plant in the case of oilfield gas.

THE CHAIRMAN: Would you say that increased price was due to the restricted purchasing power of a dollar or to restrictions of gas?

MR. MOULTON: Both, sir.

THE CHAIRMAN: In what proportion, roughly?

MR. MOULTON: That is a very difficult question to answer, Mr. Chairman, but from 1930 to 1957, if my memory, which sometimes is not very good on these things, serves me, the purchasing power of the dollar has dropped to perhaps one-third of its 1930 value. On that basis, if gas followed it, it would ---

THE CHAIRMAN: 18¢?

MR. MOULTON: It would be some 18¢ or 20¢ at the present time.

THE CHAIRMAN: Yes, and the rest of it is supply and demand, presumably?

MR. MOULTON: Yes, sir.

THE CHAIRMAN: Roughly?

MR. MOULTON: Yes, sir.

THE CHAIRMAN: I would think so.

MR. PATTERSON: Q. Turning back to the problem of areas and spheres of your operations as contrasted with eastern Canadian pipelines such as Trans-Canada, what comment have you to make on the fact that you have contracted in the field that is in Trans-Canada permits, that is the Homeglen-Rimbey field?

MR. MOULTON: Our contract in that field is with Shell Oil Company. They indicated that they would like to include that with the other fields, Sarcee, Crossfield and Waterton in the contracts that they were making with us.

Q. Did you consider including that field in a contract of any importance, as in accordance with the policy you earlier expressed as giving consideration to the requirements and likely expansion of the Trans-Canada pipeline?

MR. MOULTON: Yes, I think we knew of those circumstances at the time. The substance of the matter was that we were endeavouring to purchase gas to supply our requirements. Shell Oil Company is one of the large potential producers of gas and,

in the negotiations, said it wanted to sell that gas to us. It did not seem politic, to me, to say, "Well, we are sorry, gentlemen. We will not and cannot make a contract for that gas."

Q. Have you any knowledge as to any difference in price between what your contract for the Homeglen-Rimbey field and the Trans-Canada contract may be?

MR. MOULTON: Our price was higher than the price, I understood, Trans-Canada had contracted for with regard to other gas in that field and other fields in which it was purchasing gas.

MR. PATTERSON: Thank you.

THE CHAIRMAN: Before we -- I am sorry. Did you want to ask a question, Mr. Pattillo?

MR. PATTILLO: I was going to suggest, Mr. Chairman, that we vary the procedure which we were following the other day and perhaps, in order to speed the matter up, that any proposed examination by other counsel could be postponed and that we would now deal with other phases of the company's submission, relating to transmission cost and the price that would be achieved at the Canadian border and whether or not it would be a provident price in relation to other things; and then that other counsel proceed with their examination of the whole phase of the matter.

THE CHAIRMAN: I am sure that is satisfactory

to you, is it not, Mr. Frawley and Mr. Helman?

MR. HELMAN: I am quite satisfied, as long as these gentlemen will stay here. They are very peripatetic.

THE CHAIRMAN: I suppose you are going to suggest that we have a break now?

MR. PATTILLO: Yes.

THE CHAIRMAN: Before doing that and before I forget it, I would like to get on the record an opinion free from Mr. MacKimmie while he is here.

I asked about the regulatory authorities south of the border, Mr. MacKimmie, and would you be good enough to tell the Commission what regulatory authority S. & M. Limited would be subjected to in Canada so we have it on the record?

S. & M. buys from Alberta and Southern, is that correct?

MR. MacKIMMIE: Yes, sir.

THE CHAIRMAN: Alberta and Southern, going backwards ---

MR. MacKIMMIE: It does not buy. S. & M. transports.

THE CHAIRMAN: Yes, S. & M. transports, and the Alberta Trunk Line transports for Alberta and Southern?

MR. MacKIMMIE: Yes, sir.

THE CHAIRMAN: Now, Alberta and Southern is an Alberta company and subject to the provisions

of the Companies Act of Alberta and subject to the provisions of the Gas and Oil Preservation Board?

MR. MacKIMMIE: Conservation Board.

THE CHAIRMAN: Yes, and then we get into S. & M. Limited, and what regulatory body -- what regulatory authority governs it?

MR. MacKIMMIE: Could I answer that after the adjournment, sir?

THE CHAIRMAN: Certainly.

We will have a break of ten minutes.

---A short recess.

MR. MacKIMMIE: Mr. Chairman, my free opinion, unless Mr. McNeill of Trans-Canada wants a consulting fee, is that S. & M. Consulting Company will be under the jurisdiction of the Board of Transport Commissioners of Canada acting under the Pipe Lines Act of Canada and, I understand, that is the only authority under which S. & M. will be regulated and controlled.

THE CHAIRMAN: Thank you very much, Mr. MacKimmie. I am sure your opinion is worth more than what we are going to pay for it. Mr. Horton may have a comment as to whether P.G. & T. may have some commitments with the California Commission.

MR. HORTON: It is not quite that; I was asked about regulatory bodies with respect to Pacific Gas Transmission, and I believe I said it was the Power Commission and that is correct, but what was left unsaid and might be of some interest to the Commission is the fact that Pacific Gas & Electric Company will be required to take this entire project before the body which regulates it, namely, The California Public Utilities Commission, and in the course of proceeding we would normally expect the California Public Utilities Commission also would concern themselves with the price that P.G.E. pays to Pacific Gas Transmission at the California border, among other things; and with that statement I think you have the complete picture of the

regulatory bodies that will handle such matters.

THE CHAIRMAN: I was going to ask you that to follow through. I have just one further question: would the Federal Power Commission concern itself with the price paid in the field in Alberta for the cost of the gas to P.G. & E. at the international border?

MR. HORTON: I would not want to say they would take any of those cost elements of P.G.T. at face value without some examination behind them, so that I would expect that the prudency of any charge on the part of Alberta and Southern in the way of field prices or payments to Alberta Trunk Line for transportation or any of those components of cost, we would imagine, would receive rather searching examination of the Federal Power Commission.

THE CHAIRMAN: By the same token it leads one to the thought that Canada should have some interest to the price to the consumer at the other end. However, that is a matter of speculation. Let me get back to one other thing I did not follow through with you: as you decrease by amortization or funded debt, you thereby get into a position whereby you can increase the price to the producer, can you not, of the gas, and is that not the reason underlying, which permits the escalation clause in your contracts with purchasers?

MR. HORTON: I would say that the escalation clauses in our producers' contracts are, in the first instance, a requirement-- a product of negotiation. That is to say, the producers wanted a higher price for the gas than they had then been receiving, and by setting it up in this form we would hope that as the escalated prices got higher, 5 and 10 years from now, that the decreased costs of transmission which, in turn, are directly related to the point you make, Mr. Chairman, would help to equate that position and permit us to pay higher prices.

THE CHAIRMAN: That is what I mean; it goes right back to the producer.

MR. HORTON: Yes.

THE CHAIRMAN: Or it should.

MR. HORTON: May I add this further comment, so long as this subject has been brought up again: I am not certain I gave you a fair answer to the value of the equity stock in the declining years of the permit. I should add this: if you want to assume that at the end of the permit period no further rights to export would be granted then, of course, the value of the equity stock is related only to the salvage value of the pipeline.

THE CHAIRMAN: Correct; but if the reverse were to happen, it is going to, if you assume additional permits were to be granted and the company

then had a going concern value, that would produce a different result, although we should continue to keep in mind you are involved, in a sense, with a vanishing rate base. The rate base is declining each year as a result of depreciation accumulation and from a theoretical standpoint the amount of net income produced by the application of a rate of return would have a vanishing rate base, also, as its effect.

THE CHAIRMAN: That is right, and you would have lost your depreciation from operations through taxes.

MR. HORTON: That is right.

THE CHAIRMAN: Thank you very much.

BY MR. PATTILLO:

Q. Mr. Horton, I would now like to direct some questions to the cost of transmission of this gas to the Canadian-American border and then, later, I want to ask some questions as to the proposed selling price at the border. Which one of the gentlemen will deal with the cost of transmission? Will you deal with that problem?

MR. HORTON: I will take it initially, and if I may have the right to confirm or relate the question ---

Q. What I want to know, first of all,

take this pipeline of S. & M., which is the pipeline that will be owned by the proposed project in Canada.

MR. HORTON: Yes, sir.

Q. What will be the length of that line?

MR. HORTON: Approximately 118 miles.

Q. And what will be its diameter?

MR. HORTON: 36-inch.

Q. And what will be its maximum daily capacity?

MR. HORTON: Assuming the installed horsepower at the end of the proposed project, the maximum daily capacity will be 418.7 million feet per day.

Q. Is it proposed that that quantity be put through the line immediately the project opens? In other words, the line to be used to capacity from the commencement?

MR. HORTON: That would be our intention.

Q. What do you estimate it is going to cost you for 100 miles to transport that gas over that 118-mile pipeline per thousand cubic feet?

MR. HORTON: In the initial year of operation, Mr. Pattillo, we assume that on a cents per MCF basis for the entire line of S. & M. the cost would be 4.2¢.

Q. And then for the transportation cost of the transmission line in the United States

to the border of California, what do you estimate, in the initial year, the cost of transmission would be over it?

MR. HORTON: 12.32¢.

Q. And what would be the mileage of that line?

MR. HORTON: 614 miles.

Q. Would you please explain to me why you have the differential in these costs between a 118-mile line in Canada and the 600-and-some mile line in the States?

MR. HORTON: There are two general answers for the difference in transmission cost. In the case of the United States section of the line, the terrain is much better from a pipeline construction standpoint than the very difficult section of the line that goes through Crowsnest Pass in British Columbia. Secondly, we have some cost components in the way of duty in the S. & M. section of the line that do not apply to the American system and, thirdly, there is, as I understand, a compressor station involved in the S. & M. facilities that when applied to that relative short section of the line, in terms of the longer U.S. line, would produce a higher rate of cost.

Q. Then, I am looking at Table I, page 4, under Tab P in Volume 6 of your submission, which would be Exhibit C-17-6. Would you explain to me

items numbers 10 and 11 -- "exported from B.C. to P.G.T. Company" -- that means the export of the gas at the border of Alberta and Southern to the Pacific Gas Transmission?

MR. HORTON: That is correct.

Q. "Purchasing and transmission cost of P.G.T. Company 12.32¢". Now, I thought you said a moment ago that 12.32¢ would be the transmission cost. Why is the word "Purchasing" in there?

MR. WEGE: Mr. Pattillo, I think that is an unfortunate use of the word "purchasing"; it does not include the cost of the gas purchased. It was included to refer to the incidental cost associated with metering the gas at the border that would accrue to Pacific Gas Transmission. For all practical purposes, it could be stricken from the title and have the line read merely, "transmission cost of P.G.T. Company".

Q. Now, still looking at this exhibit, you show an average cost of your field gas of 14.48¢. Then you say, "Purchasing metering cost of Alberta and Southern of .68¢, and there is gathering and transmission by the Trunk Line of 9.40¢, making a total cost of gas delivered to S. & M., 24.56¢." Is that correct?

MR. HORTON: That is correct. You say to S. & M.?

Q. Yes, delivered to its system to take

to the American border. Is that right?

MR. HORTON: That is correct.

Q. Then you told us about the cost to S. & M. getting it to the American border. Now, has any consideration been given to determining what price would be charged at the American border for this gas?

MR. HORTON: Well, the answer, Mr. Pattillo, is, we have tried to show in the exhibit exactly what that price would be on an estimated basis in the light of the cost of service agreements.

Q. Perhaps we will get at it another way: does this price at the border of 28.75¢ include an element of profit and, if so, what per cent?

MR. HORTON: It includes a rate of return assumed with respect to the charge from Alberta Gas Trunk Line of 7 1/2 per cent. on their rate base that is used to carry this gas to us. It assumes, also, a similar rate of return on the facilities of S. & M. pipeline.

Q. So assuming your estimate turned out to be accurate, Alberta and Southern would be making a profit return of 7 1/2 per cent and S. & M. would also be doing so?

MR. HORTON: Alberta Trunk line.

Q. Alberta Trunk Line would be making a profit of 7 1/2 per cent and S. & M. would also be making a profit of 7 1/2 per cent. What about Alberta and Southern?

MR. HORTON: Alberta and Southern we do not contemplate would have any investment and facilities to speak of, that would be in the nature of a rate base.

Q. No, but it owns the gas. It is its gas that is being sold at the border, not S. & M.'s; it is Alberta and Southern's?

MR. HORTON: That is correct, but the entire concept of this project, from the beginning, has been that Pacific Gas & Electric, which is the ultimate buyer, wanted to pay the costs of the services and no more, and when you come to Alberta and Southern the only cost it will have would be its cost of the gas and the normal costs of operating an organization here in the nature of a gas-purchasing organization, and, probably, to be perfectly accurate, Mr. Pattillo, I think the contract will provide a rate of return of, say, working capital, for Alberta and Southern but the normal

estimates of a rate base, as I said before, just will not be present there. It is a non-profit organization, as far as Alberta and Southern is concerned.

Q. I want to get it clear. Alberta and Southern buys the gas from the producer and pays him and it has got to have money to do that?

MR. HORTON: That is correct.

Q. It has got to pay the trunk system so much money to transmit that gas over the trunk system's lines.

MR. HORTON: That is correct.

Q. It has got to pay S. & M. so much money to transmit the gas over its system?

MR. HORTON: Yes, sir.

Q. And it is going to get paid by Pacific Transmission so much money?

MR. HORTON: Right.

Q. And I assume it is going to make certain it gets paid enough money to be paid all those three charges I have just mentioned?

MR. HORTON: Yes.

Q. Is it not going to get anything in the way of profit on that operation?

MR. HORTON: No, sir.

Q. No profit?

MR. HORTON: No, sir.

Q. And Alberta and Southern will be a wholly-owned subsidiary of Pacific Gas & Electric.

MR. HORTON: That is right.

Q. But the company in which the public

has invested, or the two companies in which the company have or will invest in Canada, which is the Alberta trunk system and S. & M., you contemplate they will both make an annual profit of 7 1/2 per cent?

MR. HORTON: A rate of return of 7 1/2 per cent.

Q. A rate of return of 7 1/2 per cent?

MR. HORTON: Yes.

Q. Now, we will just look at this exhibit again, for a moment, that I was referring to, under Tab P, and item number 4, where we find a reference to Canadian Montana. What size facilities do you contemplate going to service Canadian Montana?

MR. HORTON: I understand the size of that pipeline will be a 16-inch line, as proposed for a trunk line.

Q. With what daily capacity?

MR. HORTON: The initial flow, as you know, is 30 million feet per day. Its ultimate capacity, I suppose -- actually, the facilities will be constructed by the trunk line, and I think Montana Power itself would be interested in appearing in these proceedings and might be able to amplify the statement.

Q. According to this exhibit, the ultimate cost delivered at Antioch, as you see it, in the first year, will be 49.14¢. Is that correct?

MR. HORTON: That is correct.

Q. How does that price presently compare with the price that is presently being paid by Pacific Gas & Electric to the El Paso people for gas delivered at Antioch?

MR. HORTON: The El Paso Company actually delivers the gas to us at the Arizona-California border and, at the present time, that price is on the order of 27¢. We then have to haul it up to the Antioch area and our facilities, so that you can add to that something like 7¢, in round numbers, making it a comparative total of 34¢, so that this is much more expensive gas.

Q. Is it proposed that the gas that goes over this pipeline be entirely for the sole use of Pacific Gas & Electric or does it intend to resell any part of it and, if so, what part?

MR. HORTON: Speaking generally, the proposal is that we will use this gas in the system of Pacific Gas & Electric Company. We have provided, in our submission to the Conservation Board, for the possibility that, enroute, we may, as a matter of good local public relations or in order to obtain rights-of-way and that sort of thing, have to dispose of some quantities of gas to serve communities in, say, British Columbia, that presently do not enjoy that service. We may have to do something similar for some small communities in the States of Washington and Oregon, but that is not our

objective or our purpose. We will do it in order to do the right thing, you might say, as we go through the territory.

Q. Well, I am looking at Tab O in Volume 6 and the proposed project to import natural gas from Canada, page 7, which forms part of a prospectus of Pacific Gas & Electric Company under date of July 23, 1957:

In the last paragraph I find this: "It is planned to have the system in operation late in 1960. Half of the gas which will be made available by the system has been offered to the Southern California Gas Company and the Southern Counties Gas Company of California."

Have they refused the offer or is it still outstanding, or what is the situation?

MR. HORTON: The offer has not been accepted, to my knowledge. I do not believe that we can accurately say that it is still outstanding. It is possible that, as a result of negotiations which are on more or less a continuing basis between the two groups of companies, that it will result that half of this gas will be made available to the Southern companies through exchange arrangements, conditional upon a satisfactory conclusion to certain other negotiations we have pending with them.

In any event, it should be clear that whether or not half of this gas is ultimately made

available to the Southern companies, physically it will be used in Northern and Central California on our system and we have a market for it.

Q. And there would be merely an exchange?

MR. HORTON: That would be the normal way it would be handled, if that comes about.

Q. I would just like to ask you: have you given any thought to the basis on which you or Alberta and Southern would sell to customers in British Columbia if they seek to obtain gas?

MR. HORTON: I would think that -- I should say, first of all, of course, that we do not want to get in a position of selling directly to consumers in British Columbia, so any arrangement we work out would be with a distributing company, a public utility here, and, from a cost standpoint, I would suppose it would compare to the price that we are proposing to charge to Canadian Montana, assuming that the load factor and delivery conditions were comparable, and our only endeavour would be to recover a price based upon cost of service as we have done all the way along the line.

MR. PATTILLO: Thank you.

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BY MR. FRAWLEY:

Q. Mr. Horton, you said the other day, you pointed out the other day that there was 1.75 trillion cubic feet each year net increase in the Alberta reserves.

A. I think I said, or at least I indicated, Mr. Frawley that based upon the information that we had during the last 10 years there had been new discoveries of maybe 1 3/4 trillion per day. That wouldn't be net in one sense, in that Provincial requirements are a certain quantity and existing exports have to be taken into consideration.

Q. The note I made was that it was that sort of thing that you were going on in developing this project.

A. That plus the existing reserves that we know about here.

Q. That's just what I want to talk about. There are certain what you call existing reserves or visible reserves at the moment?

A. Yes.

Q. But if there wasn't this trend of 1 3/4 trillion cubic feet each year annual accumulation -- I think that was another expression of yours -- of the reserves ---

A. Yes.

Q. If it were not for that you would

probably not be going ahead with the project at all?

A. Well, I think that is so. If we assume that all exploration and development were going to stop as of now, there would be little justification.

Q. That is so. By far the most important factor is this annual accumulation to the reserves, as you have been observing up over the past few years?

A. Well, "most important" is a relative term. I would say they were both important. I think what I tried to convey was that we place a great deal of weight on that trend of all reserve accumulation.

Q. You said that without that the project wouldn't be feasible?

A. I think that is so.

Q. Just apropos of that, this might be a good time to ask you what is the life of the export permit for which you have made application to the Conservation Board?

A. I believe it is 25 years.

Q. Now, you expect to get a permit for 25 years?

A. Yes.

Q. And not for any more. That is the term of the permit that you expect to receive?

A. That is my understanding.

Q. Yes. It is quite well understood between yourself and the Conservation Board that the permit, the life of the permit, will end at the end of 25 years?

A. Well, I can't say, Mr. Frawley, we have any understanding with the Conservation Board at all, but we are seeking a 25-year permit to export a total quantity of 4.2 trillion cubic feet, and, as you know, we haven't even been heard by the Conservation Board.

Q. Yes, that is so.

A. It is about as simple as that.

Q. But if you were successful, if you were completely successful, you would come away from the Conservation Board with a 25-year permit to export 4.2 trillion cubic feet?

A. Yes.

Q. You would have to recognize that that is what you had, you have no assurance for a continuation beyond 25 years?

A. That is right.

Q. If the reserves were tremendously increased, I suppose you would have a reasonable expectation that you might get a renewal for the permit?

A. Well, I think I have so indicated in our brief that where the designed capacity of this

line is 800 hundred million feet per day with the addition of the compressors.

Q. That is understandable, but now, in the light of the kind of permit you have asked for, and hope to get, there is no feeling on your part, "We will be dug in then and they will never be able to shut off our gas even at the end of 25 years"?

A. I can't say that we have got a feeling that we can't better our position. I think in fairness it may be pointed out that any increase over and above our initial capacity in explorations beyond the initial 25 years we know we have satisfied first your province and your Federal Government and Canada.

Q. That is right. If I may say so, I regard the matter of first important, and the Chairman was developing it a little bit the other day, that you, having that tremendous investment and the market to serve in California, you would have come away from the Conservation Board on this application with a permit for 25 years and no more?

A. Yes.

Q. You are doing your financing on that basis?

A. Yes.

Q. The people that are going to buy your

first mortgage bonds, whether in the United States or Canada -- I think probably all in Canada now, in view of what you were good enough to say the other day -- they will buy it on the understanding that the life of the permit is 25 years?

A. They have to.

Q. Now, just also apropos of that, I think this is a very good time to ask you -- you appreciate, of course, you can't have any gas until the Canadian requirements are satisfied?

A. I think we have so stated.

Q. That is right. I am just having you state it again for emphasis. Canada includes the Province of Ontario and Quebec where Canada now has a pipeline?

A. Yes.

Q. Putting it bluntly -- I may as well be plain speaking about it -- you can't have any gas as long as Trans-Canada needs it for Canada?

A. Insofar as needs are concerned, I think we admitted it. That is your question.

Q. The situation also is that as a result of your coming up here, Trans-Canada may have to pay more for gas than they have already paid for it?

A. That could be.

Q. Yes. It could even be -- a very ironical thing -- even if you don't get a permit?

A. I suppose so.

Q. These are fortunes of war for Trans-Canada and the good luck of the producers of gas.

Now, Mr. Horton, how many miles is it from Antioch, California to Windfall, Alberta?

A. Approximately 1300.

Q. Pacific Gas & Electric are reaching out 1300 miles to reserves that it thinks it needs?

A. That is what we have done.

Q. Do you know how many miles it is from Calgary to the Homeglen-Rimbey fields?

A. Well, I would say something in the neighbourhood of 100 miles.

Q. 100 miles?

A. Possibly less.

Q. I want you to correct me if I am wrong, but I understand that Canada Western is not even prepared to go even 100 miles to buy, that they are going to buy from you instead?

A. Well, I don't believe I could speak for them.

Q. Apropos of what the Chairman was speaking to you about this morning, depreciation rate, does the Federal Power Commission permit depreciation on a straight line basis or on a declining balance basis?

A. My understanding is that it is a straight line basis.

Q. Now, you did tell us this morning that you would be subject to the California Public Utilities Commission.

A. Pacific Gas & Electric Company.

Q. Pacific Gas & Electric would be, according to the figures that Mr. Pattillo put in the record a few minutes,ago, would be paying 49.14¢ at Antioch to Pacific Gas Transmission?

A. Well, to be more accurate, Pacific Gas & Electric Company will buy the gas at the Californian and Oregon border on the basis of our estimates at something like -- we would pay something like 41¢, and we again have estimated our costs of taking it from that point down to Antioch at something in the order of 8¢, which produces the 49¢ figure.

Q. However, the 41¢ figure at the Oregon-California line or the 49.1 at Antioch, that is the figure that would go under scrutiny by the California Public Utilities?

A. Yes.

Q. They would examine it carefully, go into every component part of that, I assume, right back to where they bought it, at Alberta?

A. I am afraid you are quite correct.

Q. They would feel free to criticize any part of it?

A. Yes, I think so.

Q. If they thought you had made an improvident contract with some Alberta producers, they would, by the fact they had control over the 49¢ -- they might make you do something, do some reducing? I just wonder what they might make you do?

A. Well, that is speculation. All I can say to you is, you will find they test these things in a very penetrating and careful way, and I don't know that -- in fact, I would be very much surprised if they would undertake to give a reduction in any contract that we had entered into. I would expect that.

Q. Well, if they did, would you think you would have any effective way of resisting their requirements, that you could go back and make gas purchase contracts in Alberta?

MR. HORTON: The most that they would do, based upon past experience, is that they would not attempt to modify the contracts, as I have said. They might go so far as to disallow some part of the cost if, to use your words, they thought it was an improvident contract.

Q. In other words, if they felt you were paying too much, that 49 cents was too much, they would permit you, of necessity, to continue to pay the Alberta producers, you would be permitted to pay off to squeeze it out of someone down the line where they had more immediate control?

MR. HORTON: That is a possibility.

Q. Now, Mr. Horton, some of these questions are somewhat disjointed and unrelated one to the other, but there is something I would like to get on the record:

Looking at this Table No. 1 that Mr. Pattillo was examining you about, can you tell me or, if you cannot, would you find out and perhaps let me know, whether or not, in building up this estimated expense, you are including deferred income tax as an expense; and I would be quite content, if you cannot tell me immediately, that you

tell me later, since you may have to ask your accountants about it.

THE CHAIRMAN: You would think this was a railway rate case.

MR. FRAWLEY: There are two or three answers on the tip of my tongue. I don't think I will give either of them.

MR. MOULTON: Mr. Frawley, in the table to which you directed your question the elements of expense relating to transportation in the different sections of the line include, first, operation and maintenance expense; second, general or ad valorem taxes levied on property owned; third, depreciation at 4 per cent -- that is a 25-year line, except in California, in the California section, where it has been computed on a 2 per cent sinking fund, which is a little different, but not significantly so; a greater return in Canada of $7\frac{1}{2}$ per cent on the depreciated, actual investment in the facilities, and, finally, considering the financing plan of the notes and bonds and the amounts which would be outstanding from time to time under the plan described by Mr. Christensen, the taxes on income that would be payable and yield the return in the amount stated.

Q. I take it from you, then, that taxes on income would be payable?

[illegible]

MR. MOULTON: Yes.

Q. No more than the taxes would be payable?

MR. MOULTON: That is correct. In fact, if you will note, on line 11, the Pacific Gas Transmission Company, those costs, in the first two years of operation, are 7½ or 2 cents less than the costs in the next three years, and the reason for that, in spite of the fact that the rate base is declining all the time, is that there are pre-operation costs involved in getting this project on the road, that for income tax purposes can be written off during the first two years of operation, and the lower unit costs on this table arise primarily from the tax credits which can be claimed in the first two years.

Q. Now, you told Mr. Pattillo that you intended to leave all questions of processing gas, where it was needed, to the producer. Is that correct? Did I understand that correctly?

MR. HORTON: I think that is substantially correct.

Q. Well, that I cannot understand at all and I would like to ask you something about it. Your line would go through many fields, would it not?

MR. HORTON: That is correct.

Q. Fields of different sizes?

MR. HORTON: Yes. Most of our fields, though, that it goes through are of large size.

Q. Fields where you would have two or three producers in one field and two or three producers in three or four more and another field, as you went along?

MR. HORTON: Yes.

Q. What I cannot understand is how you would expect the producers to build the several suitable processing plants that might be required to process your gas, and I am adding to that, would you not expect that necessarily there would have to be some sort of a cooperative effort or the producers would be faced with the building -- well, it might not be too far out to say ten or a dozen processing plants along the length of your line?

MR. MOULTON: Mr. Frawley, our discussions with the producers on exactly that problem indicated that they would contemplate joining together in a jointly-owned processing plant or that they would contract, perhaps, as the producers in Pembina have, with an organization to gather and treat the gas and the other products and, in the case of gas, then return the gas at the outlets of those treating plants to the producers as their property, and the producers, in turn, sell the gas to Alberta and Southern.

Q. Pembina, of course, is a big field,

and I suggest you may run through a lot of smaller fields. In any event, Alberta and Southern does not intend to get into the processing of gas at all?

MR. MOULTON: No, we don't. The reason for that is that for a gas and electric company processing and disposal of these hydrocarbons and other things is not, in our experience, a business we want to get into.

Q. That I can understand. It is the alternative I am having difficulty in understanding, because you say it is highly likely this gas may have sulphur in it, as well as LPG's.

MR. MOULTON: As far as I know, except for the Pembina gas, all the other gas covered by our submission and the contracts adding up to the quantities in the submission is all sour gas, it all has sulphur in it.

Q. So it has all got to be processed. I was wondering -- you have told me you left it to the producers and that what talks they had indicated that they are going to resolve all their difficulties by getting together on some sort of a cooperative venture and build all the necessary plants to process all the gas. Now, is that the way you want to leave it?

MR. MOULTON: Yes, I think that is a fair statement, Mr. Frawley, with this possible further explanation, that the producers must be

regarded as either building individual plants or, as they have discussed it with us, the probability that the producers in the field would get together and build or cause to be built a single plant. In any event, they have contracted with us to deliver us clean pipeline gas.

Q. And, of course, that could put companies like the Imperial Oil right smack in the sulphur business?

MR. MOULTON: Yes, sir.

MR. PATTILLO: We had sulphur running out of our ears the other day.

MR. FRAWLEY: Yes, sir. Somebody had better find out some more uses for sulphur.

Q. Now, Mr. Horton, would you tell me whether or not any of the companies with whom you have gas purchase contracts have any share position in P.G. and E.?

MR. HORTON: In P.G. and E.? Well, I could not say whether they do or not. I can say that, if they do, it is so minor in the line of our outstanding shares that it would be insignificant.

Q. I feel I have enough of a right to ask you that question, in view of some of the other questions asked of other witnesses.

MR. HORTON: Oh, I do not resent the question in the slightest.

Q. If there were only, say, 150 million

feet a day available for you for export, would you go through with the project?

MR. HORTON: I don't think it would be feasible.

Q. Now, dealing with your estimates -- and that may be a question for your geologist -- what have you shown as the Alberta requirements?

THE CHAIRMAN: Mr. Frawley, would it be convenient for you to resume later and that we adjourn now? It will not interrupt your train of thought?

MR. FRAWLEY: No, that is fine.

THE CHAIRMAN: Gentlemen, we shall adjourn the hearing of the Commission until 2.00 p.m. this afternoon.

---Whereupon the hearing adjourned, at 12.15 p.m., until 2.00 p.m.

---Upon resuming at 2.00 P.M.

THE CHAIRMAN: The Commission will now resume its hearing.

Mr. Frawley?

BY MR. FRAWLEY:

Q. Mr. Horton, just at the adjournment I was asking you something about the Alberta requirements, but I will come back to that in a moment. I want to go through just one or two minor matters. Let me put them to you: Would the fact that you did expect to encounter sulphur content in the foothills gas be a deterrent to the development of those reserves in the Alberta Southern scheme?

MR. HORTON: We think not under the price schedule we propose to pay.

Q. How was that price arrived at that you propose to offer, that you have offered to the gas producers?

MR. HORTON: I think I would like to have Mr. Moulton answer that because he actually conducted those negotiations.

MR. MOULTON: It was arrived at by negotiation, Mr. Frawley, starting with a lower price than finally agreed upon.

Q. I might say that this is hearsay,

that the producers arranged it and there is evidence to the effect the foothill structure are deeper structures and more expensive to drill than the Prairie structures to the easterly part of the Province. One of the producers who has had experience has said they were not coming out wholly on an existing contract, and if that was the limit of price they would just have to take their money elsewhere where they could get a better payoff. Was it determined at all, in whole or in part, by what you think you can get in the United States at the Antioch end of the line?

MR. MOULTON: Unquestionably, that was in our minds, Mr. Frawley, because this gas, as shown by the gas about which we were questioned this morning, shows the delivery cost at Antioch to be around 50¢, which is more than the delivery cost of either California gas or gas purchased from El Paso, but we felt that the requirements of our firm customers for additional gas were such that this was the next least expensive source that we could look to, and we have found, through our years of experience in the natural gas industry, if the producer, on the other hand, is not paid a price which is sufficient to cause him to go into additional drilling and exploratory work, the additional gas reserves will simply not be developed.

Q. Looking again at the 50¢ gas, Alberta gas costs 50¢ to P.G.E. at Antioch. We heard the other day in 1954 the San Francisco gas market was 34¢, and now you are going to have to pay 50¢ for Alberta gas. You, I mean P.G.E., are going to have to pay Alberta and Southern 50¢ at Antioch. How do you reconcile these two statements: 34¢, which would seem to be the factor -- did you limit the ability of Pacific Northwest to pay 22 1/4¢ to Westcoast, that on the one hand, and, on the other hand, your being able to pay 50¢ for Alberta gas at Antioch? Those two things seem to be somewhat irreconcilable. Maybe you can reconcile them.

MR. MOULTON: I do not think they are irreconcilable at all. The first discussions were in 1954 with many elements in the consideration then, which caused us, after Westcoast had been turned down by the Federal Power Commission and came to us seeking a market for their gas, to decide we ought not to then purchase it, and 1961, let us say, when we hope that this Canadian gas we are now discussing can first be brought into the California market, that is seven or eight years later, and, I think, the market value of gas to meet requirements of firm customers in California has changed that much during that period of time.

Q. I had just, momentarily, forgotten

that you were one of the proposed contracting parties when Mr. McMahon went to San Francisco after having lost out before the Federal Power Commission. That is true?

MR. MOULTON: Yes, sir, I participated in those discussions as one of the P.G.E. representatives.

Q. At that time you were a party to the fixing of the figure of 34¢ as being the value of Canadian gas in San Francisco?

MR. MOULTON: Yes, I believe I was.

Q. And what you say is, that was -- and, therefore, I am going to assume -- not a fictitious but a perfectly fair price for Canadian gas at that time, was it?

MR. MOULTON: We felt, as of that time, that was the maximum that we should pay for Canadian gas because, as of that time, we felt that cheaper ultimate sources were available to us and, as events have turned out, we were right. We have been able to buy substantial additional quantities of gas at lower prices. The cost of gas we were then getting in 1934 -- I mean, 1954 -- was appreciably less than 34¢, but looking toward the future, as we saw it at that time, 34¢ would have been all that we would have been willing to pay for Canadian gas had there not been other factors, undesirable, in our judgment, to purchasing Canadian gas at all.

as of that time.

Q. Tell me, then, what is the comparable figure today against that 34¢ which we have as the San Francisco value in 1934?

MR. MOULTON: As of 1938 or projected ahead?

Q. Take it in 1961, because you are not going to be in business until 1961.

MR. PATTILLO: Let us get the years straight. There has been some talk about 1934, 1938 and 1954. As I understand it, the earliest year we are concerned with is 1954.

MR. FRAWLEY: I was not following you at all. I am glad Mr. Pattillo mentioned it.

Q. I am talking about 1954 when you were one of the parties when you determined the value of Canadian gas, North British Columbia gas, in San Francisco as 34¢. What is the comparable figure, say, for 1958 and 1961?

MR. MOULTON: As of 1961, the fact that we are moving ahead, endeavouring to secure all the necessary authorities to put this project on the road, indicates that for a proportion of the gas we hope to get from Canada, we can afford to pay 50¢. The weighted average cost of gas, at that time -- Mr. Horton said about half of the total will be coming from El Paso, another 25 per cent from California sources, which will be less

[illegible]

going up in prices [illegible]

MR. PATRELL. [illegible]

[illegible] There was [illegible]

130 a month. [illegible]

[illegible]

than that price; but looking still further in the future, rightly or wrongly, we have very great confidence, I would say, in the development, with the stimulation of a market, of extremely large reserves here in Alberta that will more than take care of the respective requirements of Canada and still afford reserves that will be adequate not only for the 4.2 trillion we are now applying, but additional volumes that can be made available in the future. We are confident that is going to happen; if it does happen, if we are able to increase the initial volume of some 400 million feet a day to twice that, our delivery cost in the San Francisco Bay area, in place of paying 50¢, as measured by transmission costs, would be reduced by, perhaps, 10¢. So, we have both of these factors in mind: what we will pay if the 400 million project is authorized and we get no more gas and our own confidence in the future that leads us to think we can improve that transport cost as the years go on, not only because of the depreciation that will reduce gradually the investment on which transportation costs must be based, but, also, because with more gas moving through the line at any one time, the unit cost of transportation will be less.

MR. FRAWLEY: Q. Now, Mr. Moulton, I want to see if I understand it. Has the 34¢

become 49¢? Is that, putting it bluntly, what has happened?

MR. MOULTON: The ability to pay the higher price, I think, will exist in California in 1961.

Q. In other words, what you felt was worth 34¢ in the summer of 1954 will be worth 49¢ in 1961?

MR. MOULTON: Yes.

Q. In 5 years the value of our gas in the San Francisco Bay area has gone up by 15¢?

MR. MOULTON: It is 7 or 8 years, Mr. Frawley, and there are other circumstances which enter into it, but the net result comes down to that.

Q. And, I suppose, when you say your El Paso gas at the Arizona-California line costs 7¢ and you gave the San Francisco Bay area 34¢ ---

MR. MOULTON: Yes, but you said, I think, inadvertently 7¢ instead of 27¢ currently at the border.

Q. 27¢, sure; 27¢ at the Arizona-California line for gas coming through the El Paso line and that becomes 34¢ in the San Francisco Bay area?

MR. MOULTON: The cost of California gas, like that of El Paso, when we received our first deliveries from El Paso, I attempted to call

your attention to the fact that it is 34¢.

Q. The value of the El Paso gas is 34¢ and the McMahon gas we were talking about, in 1954, was 34¢. Is there any significance in that, or is that a mere coincidence?

MR. MOULTON: In 1953-1954 our gas, El Paso gas at the border was 21¢ or about 28¢ delivered at San Francisco.

Q. 28¢?

MR. MOULTON: Yes, sir.

Q. Then why was McMahon's gas worth any more than 28¢ when he went down there bargaining in 1954?

MR. MOULTON: I think I have said, Mr. Frawley, in considering the prospect of an additional alternate source of gas, we thought we should assign a higher value to it, looking toward the future, than our then existing current cost of gas.

Q. Were you discussing a border price with Westcoast in 1954, a price at the end of their pipeline at the British Columbia-Washington line?

MR. MOULTON: Yes, sir.

Q. And what would that have been?

MR. MOULTON: That would have been in the range of 20-22¢.

Q. 34 minus carriage charges?

MR. MOULTON: Yes, sir.

[illegible]

Q. Were you discussing anything in the nature of building a line from Boise, Idaho, to San Francisco or anything of that sort that we heard about here last week?

MR. MOULTON: It was proposed to us -- we have consistently thought that that line, by its location, would be a very unsound project.

Q. I suppose I should be asking you about Alberta and Southern but we probably have to learn something more about Westcoast.

Can you tell me why the basing economics for the Westcoast gas was not the Puget Sound area rather than the San Francisco Bay area?

MR. MOULTON: I don't feel I can appropriately comment on any negotiations between Westcoast and Pacific Northwest.

Q. But they were endeavouring to sell this gas to you, the P.G. and E., at San Francisco?

MR. MOULTON: There were two different negotiations, Mr. Frawley. We had two different negotiations, the first one of which was with Mr. McMahon and his associates, immediately following the denial of his application to supply gas in the States of Washington and Oregon by the Federal Power Commission.

MR. MOULTON: Later on, there was proposal made to us by El Paso which involved the

construction of a line from Mountain Home, Idaho, to some point on the California-Nevada border, at which point we would pick it up.

Q. Is it fair to say that this talk about what the gas was worth in San Francsico was just a lot of paper talk to establish a value, without any real intention of taking it to San Francisco?

MR. MOULTON: Which negotiation are you talking about?

Q. The negotiations you say you participated in, in which you say you arrived at a San Francisco Bay area price of 34 cents.

Was that a real, honest discussion for the purpose of bringing Westcoast gas into that area, or was it, on the contrary, something which I speak of, not offensively, as paper talk to establish a value but with no real intention of taking the gas down there.

Which was it?

MR. MOULTON: I would like to confine my reply to the first negotiation. That was with Mr. McMahon before Pacific Northwest was in the picture as a purchaser of the Westcoast gas.

Q. Yes?

MR. MOULTON: In fact, I think I could go back one step further into the background of this to the time when the Westcoast application and the

Pacific Northwest application were both pending before the Federal Power Commission, and P. G. and E. was an intervenor in that case in opposition to the granting of a certificate to the Pacific Northwest Pipeline Company, and our grounds for that were that they proposed to take the gas from the San Juan Basin in the northern corner of New Mexico and adjacent states, at the time that we were obtaining part of the El Paso gas from that area and the balance was from the Permian Basin in the southeastern part of New Mexico and the adjacent parts of Texas.

We made a representation to the Federal Power Commission that the logical market for the San Juan gas was the California market, while the logical source of the gas for the States of Washington and Oregon was Canadian gas.

Q. Yes?

MR. MOULTON: When the Federal Power Commission granted the Pacific Northwest application, Mr. McMahon came to us and said, "Here, I have these prospects of Canadian gas. Can I sell it to you for your use in Northern California?"

Now, under those conditions the value to us in Northern California of that gas was measured by our market and what we felt our customers could reasonably be asked to pay, what our costs of gas from other sources were and were expected to be; and, on the basis of those considerations, we felt

that we could not pay Mr. McMahon a fair price for his Canadian gas and I think we in the P.G. and E. were the ones that suggested to Mr. McMahon that in spite of the bitter battle that had been raged before the Federal Power Commission, that was then past history and why did he not go and talk to Mr. Fish.

Q. You had been telling the Federal Power Commission that the San Juan Basin gas was the gas to be supplied to Northern California?

MR. MOULTON: Yes.

Q. And not the Westcoast gas from Canada, and that should have been in the States of Washington and Oregon?

MR. MOULTON: Yes, sir.

Q. Well, with that, having just finished taking that position, how could you have any serious discussions with Mr. McMahon about buying his gas for distribution in Northern California?

MR. MOULTON: First of all, Mr. Frawley, Mr. McMahon came to us. Secondly, he apparently had lost the opportunity of supplying gas to Washington and Oregon because the Pacific Northwest project contemplated bringing gas from the San Juan Basin and, in spite of considerable evidence going towards the inadequacy of the San Juan Basin reserves to supply the requirements, nevertheless the Federal Power Commission gave weight to evidence indicating

that there was enough gas there.

So they were going to build a line from San Juan into Washington and Oregon and use that gas to supply those States, so, as of that time, that apparently left Mr. McMahon without a market other than a possibility of the California market.

Q. Oh, yes, other than the possibility of the California market, and you had been telling the Federal Power Commission, over the whole period of the application, that Northern California should be supplied from San Juan, and I put it to you very bluntly, Mr. Moulton, that it was not a serious discussion at all when Mr. McMahon talked to you about Northern California. You may have been arriving at certain figures on paper, but there was no serious intention about putting that gas into Northern California at all.

Now, what do you say about that?

MR. MOULTON: I say that is not correct. We had some serious and sincere discussions with Mr. McMahon, but it was our final conclusion that that avenue was not the one that we finally selected. They were not capricious. We were not just talking to him for the fun of talking to him. We were carefully examining his proposal and comparing it with other matters.

. You had taken up a certain position before the Federal Power Commission and that was

a considered view of your company, a position you had taken for months, that Northern California should have been supplied by the San Juan Basin and not by Mr. McMahon's gas.

Now, that is the one, isn't it?

MR. MOULTON: No, sir. You added that California should have been supplied by the San Juan Basin and not by Mr. McMahon's gas. That last statement of yours was not any part of our contention.

We said that we thought the use of the Peace River gas in Washington and Oregon was preferable, from the standpoint of over-all efficient use of the gas reserves.

Q. Well, now, taking it as amended, your position before the Federal Power Commission was that the better place for the McMahon gas was in the States of Washington and Oregon, and the better place for the San Juan gas was in Northern California.

That is correct, is it?

MR. MOULTON: Yes.

Q. Then there came some intervening discussions with Mr. McMahon, and the third stage was that you agreed the place for McMahon's gas was Washington and the State of Oregon?

MR. MOULTON: No, sir. You have the chronological sequence incorrect. The hearings

before the Federal Power Commission came first.

Q. That's right.

MR. MOULTON: At that time we had not discussed with Mr. McMahon. It was only afer the Federal Power Commission, with the result that Mr. McMahon was without a market in Washington and Oregon for his gas and, No. 2, some of the San Juan gas that we felt should more logically come to California should have been permitted, by connection, to carry through into Washington and Oregon.

Q. Mr. Moulton, I put it to you in a different way that, in the last analysis, you told Mr. McMahon that you thought that the best place for his gas was in the States of Oregon and Washington.

MR. MacKIMMIE: Mr. Chairman, before Mr. Frawley puts it another way, he has been putting it several ways and now has put it in half a dozen ways. I am not too sure it is fair to ask Mr. Moulton to try to describe the thinking of his own company and other companies, as well as that of the Federal Power Commission, and what was done there three or four years ago. I think it is a little difficult to ask Mr. Moulton to describe these things in such detail.

THE CHAIRMAN: Oh, Mr. MacKimmie, I do not know. I think I know what Mr. Frawley is getting at, and I think you do. If Mr. Moulton has facts within his personal knowledge with respect to this,

he can say so and he should say so in answer to Mr. Frawley's question and, if he is giving an opinion, let him say so. If he has knowledge of these matters, I do not think it is unfair, really not. I know that Mr. Frawley has asked the question three or four ways.

MR. FRAWLEY: Q. Mr. Moulton, it happens you were in those negotiations; something I had not appreciated at all. It seems to me we are fortunate to have you here, who did take part in negotiations, and I will put my question again and I hope it will not be in any seventh way; my friend Mr. MacKimmie seems to have kept count.

You took the position before the Federal Power Commission and you joined up with the Westcoast position and made representations that the States of Washington and Oregon was the place for the Westcoast gas, that is correct, isn't it?

MR. MOULTON: Mr. Frawley, I don't know how technical this Commission wants me to be in either agreeing or disagreeing with your questions. I said that we intervened before the Federal Power Commission in opposition to the Pacific Northwest project. We did not intervene in support of the Westcoast project, as I recall it.

MR. PATTILLO: We can be here all day and half of Sunday. Can't you really just state this thing, that you did, in the result, have the same

position as Westcoast, that you both wanted the Canadian gas to go into the Northern States, isn't that the position you were in?

MR. MOULTON: Yes.

MR. FRAWLEY: That's it. We must not be disturbed about whether you were intervening against anybody or for anybody, but you did take the position that the place for the McMahon gas was in the States of Washington and Oregon?

MR. MOULTON: Yes, sir.

Q. Then certain negotiations took place between you and Mr. McMahon in San Francisco with regard to getting gas down and what it would be worth and you arrived at a price of 34 cents?

MR. MOULTON: Yes.

Q. But nothing happened; it did not go down there?

MR. MOULTON: That is right.

Q. Because you sent Mr. McMahon away with a piece of advice that the best place for his gas was in the States of Washington and Oregon, that is correct, is it?

MR. MOULTON: No, sir.

Q. Where do I become incorrect in that statement?

MR. MOULTON: The Pacific Northwest project, as I think you know, runs from the San Juan Basin up through Colorado, Wyoming, Idaho.

One of its proposed customers was a tap in either Southwestern Wyoming, which would run over to supply Colorado, interstate, which, in turn, supplied Eastern Colorado, along with other areas.

We did not know where Pacific Northwest might use gas, if it was interested at all in buying it. It was a little gratuitous advice on our part that maybe Mr. Fish, through his project, could find a market, but he had a certificate to use gas in the San Juan area and he said he was going to use gas in the S n Juan area, from which we did not know whether he would develop a market some place else which would enable him to increase the size of his then authorized production and supply a market for the Peace River ---

Q. If I may say so, that is just another way of putting it. You said he thought he would be well advised to talk to Mr. Fish and, in that way, get his gas into Washington and Oregon. That is roughly what you said to Mr. McMahon?

THE CHAIRMAN: He said that a long time ago.

MR. FRAWLEY: You are not changing that? That was the situation when you left off talking to Mr. McMahon?

MR. MOULTON: I would not change my

testimony in any way.

Q. I put it to you again, Mr. Moulton, that I find it difficult to understand, from everything you have said, that there was any serious discussion or talk of taking his gas physically to the San Francisco Bay area.

MR. MOULTON: No, you are incorrect in that, Mr. Frawley.

THE CHAIRMAN: Mr. Frawley, may I intervene?

MR. FRAWLEY: I cannot pursue it any further, sir.

THE CHAIRMAN: I do not think you could, sir, because the witness has given you the answer to it. He did say it was serious and they decided against the 34-cent gas at San Francisco, that they just could not use it, in the light of the circumstances existing at that time, so they suggested to Mr. McMahon that he talk to Mr. Fish and get his gas from the northwestern States.

Is that a fair summary?

MR. MOULTON: Yes, Mr. Chairman.

MR. FRAWLEY: Q. Now, this question may be for Mr. Horton or Mr. Wege. What does the Alberta and Southern scheme estimate Alberta and Southern requirements to be?

MR. HORTON: We have indicated on Schedule B, Mr. Frawley, requirements of 7 trillion,

609 billion.

Q. Do you not add something, as Mr. Govier did, somewhere in the neighbourhood of an additional 4 trillion, from the deliverability standpoint, making Alberta's requirements between 11 and 12 trillion?

MR. HORTON: No, sir, we have not. The figure I gave you actually was taken from the January 31, 1957, report of the Conservation Board and, incidentally, we had it re-checked independently by Dr. Harries and he has concurred in that.

Now, you referred to this extra amount of -- I think Dr. Govier used the term "cushion gas", which, as I understand it, as I understand his testimony, which came out in cross-examination -- I don't believe it was in the Conservation Board's testimony to this Commission -- but, in any event, as I understand the gist of his testimony, it was gas that should be in the ground, in the thirtieth year, in order to permit of the deliverability of which you speak, and we are dealing with 30-year estimates.

We have not shown any such figure and, I think, properly so. It is not needed now. It is needed some time before the thirtieth year, and I don't know whether the twentieth or the twenty-fifth year you ought to be sure you have it.

But, in any event, I say this, Mr.Frawley, that if you want to give consideration to the need for that cushion gas in the thirtieth year that at the same time you must give consideration to the trend of increases in reserves that are going to be building up between now and then.

Q. In any event, it is not in your figure. You leave it at 7.6 trillion and do not take it up to 11 or 12 trillion, as Dr. Govier did?

MR. HORTON: That is correct.

Q. Do you take into account some 800 billion cubic feet of uneconomic reserves? You have not taken that into account, I think.

MR. HORTON: I think you are correct.

Q. You think you did not?

MR. HORTON: That is correct.

Q. Also, you do not allow, in this Schedule B attached to your submission, any additional gas for Trans-Canada?

MR. HORTON: None.

Q. Now, coming to your ---

MR. HORTON: Not as much, I should say. We have not allocated any additional gas in this Schedule B to any of the export companies that was designed for that purpose.

Q. Coming to your dealings with the Alberta utilities, you must add the cost of a pipeline connection from your line to where it

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

would be usable by Alberta utilities. That must be added in?

MR. HORTON: I think they would have to be, yes.

Q. Yes, they would have to do that?

MR. HORTON: Yes.

Q. And it is about a 30-mile line, I am told. But you are just leaving that to them, are you?

MR. HORTON: Yes.

Q. And whatever that would cost is just another extra expense to them?

MR. HORTON: Yes.

Q. Now, I have only one further question for you:

The Westcost project can also carry, is capable of carrying -- I do not mean the existing one, but the proposed one -- 400 million to 660 million cubic feet, ultimately. Would you agree that all the benefits you suggest could accrue from that project?

MR. HORTON: I think many of them could but not all of them.

Q. Mr. Horton, you told us the other day, you made a calculation, or Mr. Christensen did, as to what the value of the various 7 per cents, 9 per cent in the case of Bechtel International and 7 per cent in the case of the other companies, and

you worked it out at about 400 million for the Alberta utilities for 7 per cent.

MR. MacKIMMIE: Two million.

THE CHAIRMAN: That is a little high, in my recollection.

MR. PATTILLO: Two million.

MR. FRAWLEY: Two million for 7 per cent.

Q. What is Pacific Gas and Electric paying for its 50 per cent of the Pacific Gas Transmission common?

MR. HORTON: I think I have covered this before but I will be glad to go over it again.

Pacific Gas and Electric Company pay, at the time the stock is offered to the public, for the shares, the shares that it purchases, the same price as that paid by the public, less underwriting commissions and expenses, or are you seeking a dollar figure?

Q. Well, it will be on the same basis as the other figures you have given us, I suppose?

MR. HORTON: Yes, it will compare to the estimates that have been given, and they are purely estimates.

MR. FRAWLEY: Thank you, Mr.Horton. Thank you, Mr. Chairman.

THE CHAIRMAN: Mr. Helman?

BY MR. HELMAN:

Q. Would you mind turning to page 10 of your brief? You have a list there of the fields you are going to obtain gas from, Mr. Horton.

MR. HORTON: Yes, sir.

Q. And perhaps for my edification you would not mind pointing them out on the map. I want to see how practical some parts of your scheme are.

Where is Paddle River?

MR. HORTON: May I ask Mr. Moulton to do that?

MR. HELMAN: I would be glad if anybody did it. It is just to educate me, perhaps.

MR. MOULTON: Paddle River lies north-westerly of Edmonton and between Edmonton and the Windfall area.

Q. How far from the Pembina field is it? Could you hazard a guess at it?

MR. MOULTON: I would say it is 40 or 50 miles.

Q. And the Pembina field is the large green field underneath that, again?

MR. MOULTON: Yes, sir.

Q. And the Minnehik-Buck Lake is a little appendage to the Pembina field?

MR. MOULTON: Yes, it lies off south-easterly.

[illegible]

[illegible] through [illegible]

[illegible] people. [illegible]

[illegible]

Q. Then we come to the Dick Lake field.

MR. MOULTON: It lies down in this area (indicating on large map). The Conservation Board refer to it as Westerose South.

Q. Then we have the H meglen-Rimbey field. I do not think that is marked on that map?

MR. MOULTON: No, but the Homeglen-Rimbey lies in this area (indicating), not too far from the Dick Lake field.

Q. Then the Crossfield field.

MR. MOULTON: It is off down in this area (indicating).

Q. I think it is a little closer to Calgary than that.

Now, be careful about this one: then we have the Sarcee field.

MR. MOULTON: The Sarcee field lies ---

Q. Just 20 miles west of Calgary, in my recollection of it?

MR. MOULTON: Yes.

Q. Then the Pine Coulee field.

MR. MOULTON: That lies southeasterly of Calgary.

Q. Then the Castle River field.

MR. MOULTON: The Castle River field and the Waterton field are these two fields down here, near the southwestern corner of the province

(indicating).

Q. Thank you very much.

Now, I was going to ask Mr. Horton, or perhaps you can answer, which of these fields are fields of high sulphur content.

MR. HORTON: I think, with the exception of Pembina, Mr. Helman, they all have sulphur to some degree or another.

Q. Well, some of them are low acid content and some very high.

MR. HORTON: Yes, they all require some processing, as I understand it.

Q. Can you tell us the ones that are high acid content?

MR. HORTON: I would say the Waterton-Castle River is one that would be in that range.

Q. What about Paddle River?

MR. HORTON: Paddle River is low, as a guess.

Q. What is the percentage in Paddle River?

MR. HORTON: It is a very small percentage. We do not have the exact figure here.

Q. To my own inflexible mind, that might be either one per cent or 15 per cent.

MR. HORTON: Mr. Wege tells me it would be approximately 3 per cent.

Q. Has the Pembina field any sulphur

content in it?

MR. HORTON: No, sir.

Q. The Minnehik-Buck Lake field?

MR. HORTON: Two to three per cent.

Q. And the Westerose?

A. One or two per cent.

Q. And the Homeglen-Rimbey?

A. Five per cent.

Q. Crossfield?

A. 3.75.

Q. Sarcee?

MR. PATTILLO: Mr. Chairman, I don't want to interrupt my friend if there is any purpose to this examination. As I understand the evidence here on the deal proposed between the producers and this company for their sulphur or liquid gas products or any of these things it is the responsibility of the producer and not the concern of this company at all. This company is paying a certain price for the producer's gas and that price apparently reflects on what the producer thinks he may have to do with the problem of sulphur. We went into this sulphur the other day and I quite frankly -- maybe it is some concern of my' friend but I think he should explain it to us so that we can see whether or not it has a significance to this Commission.

MR. HELMAN: I just have three more fields and then I will explain it, Mr. Pattillo, if you will just rest in patience for a while.

Q. Sarcee field?

A. Five per cent.

Q. Pine Coulee?

MR. HORTON: I don't believe that we have that one.

Q. And Castle River and Waterton fields -- I think you said they were high before, about 14 15 per cent?

MR. HORTON: Thirty-four per cent.

Q. What I am getting at in connection with this, in your evidence you said these companies were going to join together to put up processing plants or a processing plant. Do I understand that from the north of Paddle River down to Waterton there is going to be another pipeline to join up this sour gas so it may be processed?

MR. HORTON: No, I think, Mr. Helman, what Mr. Moulton said in that connection this morning was that he found from discussions with producers that in another field there may be five or six or seven producers in the same field and it would be their plan to join together in that field for the processing plant, and so far as I know we had no contemplation of one big processing plant joining up a sour gas pipeline as you describe.

Q. So there will be some seven or eight processing plants in order to supply you with your requirements?

MR. HORTON: That could be.

Q. At considerable expense. They are expensive things?

MR. HORTON: Well, whatever it is, it is the producers' concern.

Q. It may be the producers' concern. Can you give me the plans of the processing plant?

MR. HORTON: No.

Q. We had it the other day from Westcoast.

MR. HORTON: No, I don't believe I can.

Q. You can't do that. I see.

Now, I observe that Sarcee, which I took to be a low-acid content field close to Calgary has been taken over by your company?

MR. HORTON: We have a contract with that company, subject to permits.

Q. Don't you think that is an natural source of supply for the West Canadian field?

MR. HORTON: For what?

Q. West Canada company?

MR. HORTON: The Canadian Western?

Q. Canadian Western, that is correct.

THE CHAIRMAN: Mr. Helman, I have got to reiterate this again -- I am sorry -- it seems to me that a lot of these questions are -- certainly I will offer every latitude within reason to counsel but we are really hearing an application before the Oil and Gas Conservation Board. That, it seems

to me,is the place for questions such as these to be addressed when the hearings are on. Because this Commission is concerned with the national policy with respect to export of gas. That matter would have to be taken up with the Oil and Gas Conversation Board. I mean there is a Federal body taking and considering all these factors, high-acid content and that sort of thing. That is a function of the Conservation Board of the Province, surely?

MR. HELMAN: May I say two things to that, Mr. Chairman: First with regard to the local utility company I think that it illustrates in a very definite way some of the problems that the export of gas is going to raise for the local consumer. Now, I submit the rights of local consumers are just as important as the rights of consumers in Toronto or Montreal. Therefore when you are considering allowing the export permit or directing that it be allowed we are just as interested in what is going to happen to the local consumer. We have to see that. That is part of the picture. If these export permits are going to take away our rights so we have to pay an inflated price then I submit that is just as important as what is going to be paid for gas or what gas is going to be set aside or used for Trans-Canada .

THE CHAIRMAN: I agree with you on that

score but you can't have your cake and eat it. As I see it, the benefits that accrue -- if that is the policy, the export policy -- to the Province and the country as a whole must be weighed against the higher cost to the local consumer of gas.

MR. HELMAN: Yes.

THE CHAIRMAN: That has been brought out and demonstrated before this Commission every day in the last two weeks.

MR. HELMAN: Whether it has to be weighed that way or not I want to demonstrate to you that what the price of our gas is going to be -- so far as the problem of Sarcee is concerned you raised that with me the other day, Mr. Borden, and I was thinking, perhaps, a simile, suppose you are dealing with the export of milk and we are going to get extra cows up here to produce milk for marketing across the border line. Surely you would be interested in knowing whether there was any waste in butter in that production ---

THE CHAIRMAN: I would weigh it against the fertilizer.

MR. HELMAN: Then, we have to know what the fertilizer is and we have to know what the butter value is ---

THE CHAIRMAN: Well, go ahead, Mr.Helman. Just confine it, please, to ---

MR. HELMAN: Well, I take it that I am

not supposed to go into this problem.

THE CHAIRMAN: I think the more appropriate place, quite frankly, is the Conservation Board.

MR. HELMAN: Well, perhaps.

THE CHAIRMAN: I don't want to suggest in saying that in the way in which perhaps you phrased your statement, that we are not interested in the consumer of gas in Alberta; we are, I mean, in this province.

MR. HELMAN: Well, perhaps I can ask these two questions ---

THE CHAIRMAN: Certainly.

MR. HELMAN: --- which may be quickly answered.

Q. Have you calculated the amount of liquid and petroleum products which will be saved under your scheme, I mean produced ---

MR. PATTILLO: That question was asked this morning and the answer given was "no".

MR. HELMAN: I see.

Q. Have you calculated the amount of sulphur that this scheme will produce?

MR. HORTON: No.

MR. HELMAN: I don't think that was asked.

MR. HORTON: No, we have not.

MR. HELMAN: Q. Your company has come out with a lot of information to the public about the fact that you are offering the local utility company your gas. I just want to clear that up. The gas

that you are offering to the local company is at a high load factor, isn't it?

MR. HORTON: Well, we will be purchasing the gas on a high load factor base.

Q. I didn't ask you what you will be -- just what you are offering to the local company that is going to get the gas, Canadian Western Natural Gas?

MR. HORTON: Well, I want to be surethat I understand the question, Mr. Helman. The base load gas that the local utility is going to buy will be purchased on a 7 per cent load factor, if that is your question.

Q. You are going to let them have it at a 7 per cent load factor. Is that right?

MR. HORTON: That is the understanding. We want to give it to them.

Q. They will pay for it what you are paying for it? Well, I should have said deliver it to them. You know, of course, that the consumers of the local utility are on a 42 per cent load factor?

MR. HORTON: I have heard that figure, yes.

Q. Well, exactly what price is Canadian Western going to pay for the gas it gets from your company, for the base load factor gas?

MR. HORTON: They pay, as I think has

been said here, our weighted average field price, plus an appropriate transmission charge.

Q. Don't you know what that weighted average field price is?

MR. HORTON: We have estimated it in the first year of our operation as 14.48 cents as the cost of gas purchased in the field.

Q. Yes. Well, I want it right at your pipeline, where the Canadian Western Natural Gas is going to get it from.

MR. HORTON: Well, it would include the transmission charge.

Q. Well, now, you have a figure, haven't you, in your Table 1, the item under Tab P. Is that what you are looking at?

MR. HORTON: Yes.

Q. Cost of gas from A.G.T.L. company facilities. Is that the price you are going to charge? That is 24.56.

MR. HORTON: No, that is the figure that was calculated to determine the price where we took it off from the trunk line in the southern part of the province and delivered to the S. and M. pipeline.

Q. Yes?

MR. HORTON: It wouldn't necessarily be the price that Alberta utilities would pay.

Q. What you would have to do is work backwards for the number of miles away you are?

and deliver to S and M pipeline, to a point near Calgary?

MR. HORTON: Well, you see, Mr. Helman, this figure you have referred to includes 9.4 cents estimated on trunk line charges for service throughout the orovince. That may or may not be the sppropriate transmission charge.

Q. You wouldn't like to estimate what it is?

MR. HORTON: Well, we can't until we know the method and means by which the trunk line will set up this charge. I would say this to you that on an estimated basis it wouldn't exceed that.

. It wouldn't exceed that?

MR. HORTON: I would think it would be in many cases be something less than that.

Q. Well, I imagine it would be less because you have a shorter distance for the transmission, haven't you?

MR. HORTON: That is right.

Q. And what are the transmission costs per mile per Mcf or per hundred miles?

MR. HORTON: In the trunk line system?

Q. Yes.

MR. HORTON: I don't know.

Q. Haven't you worked out backwards from the 9.4 that you gave us?

MR. HORTON: No, we haven't. In fact I

don't think that we can because we have gas coming in from all these various sources and that complicates the calculation for one thing.

Q. Yes. Well, do you think 24.56 less perhaps a couple of cents would be somewhere near the price, I suggest to you, that the Canadian Western would have to pay?

MR. HORTON: Well, I hesitate to guess because the very reason that we put these words "appropriate transmission charge" into the agreement was dictated by the fact that we aren't able to -- we couldn't when we signed the agreement -- determine what the basic components would be, that is, from what fields we would be buying gas, how much volume and what rate the utilities would take and the number of these -- or what the price would actually be from trunk line, and the method by which they would charge us for this transmission cost.

Q. How did you arrive at this 9.4 figure that you got?

MR. HORTON: We arrived at that by merely engineering ourselves on paper with trunk line system as it would be if we built it.

Q. Yes, I see.

MR. HORTON: And took all the costs, estimates, costs of capital and operating cost; it isn't a figure that the trunk line has tied itself to; in fact, they have been very careful ---

Q. I am not asking you that. I am asking you the price délivered to the closest point to Calgary at the same basis.

MR. HORTON: We can't now but I would say this to you that when it comes time to deliver the appropriate transmission charge we will charge the utilities either on the basis of the trunk line charges to us or on the basis of what it would cost them to take that gas had we not been in the picture, whichever is the lesser.

Q. Well, all I am trying to do is to tell the people at Calgary what their gas is going to cost them. You can't help me with regard to that?

MR. HORTON: Well, I could give you some help. I have given you the average field cost and I have given you an outside figure on transmission cost and I have said it would likely be something less than that.

Q. Something less than the 24.56. Is that it?

MR. HORTON: Yes.

Q. Will you go another step and tell me what is a reasonable estimate of how much less it would be?

MR. HORTON: No, I can't do that.

Q. Will you give me an outside figure of how much less?

MR. HORTON: No, I can't do that either.

Q. You can't help the consumer in this part of the world at all with regard to the cost of gas?

MR. HORTON: I think I have gone as far as I can go. I will say this, that that is a matter that we are trying to pinpoint ourselves and it could very well be that by the time of the Conservation Board hearing -- where I would think this matter would be of interest again -- that we may have something more to bring before you.

Q. I see. Have Pacific Gas and Electric, your Southern California distribution company, storage on the P. G. and E. fields?

MR. HORTON: Speaking for P. G. and E. we have one project that is nearing completion now in the way of storage and it is expected to be in operation I think by the time that this project will be approved.

Q. Well, at the present time what do you have for storage for your supply of gas to San Francisco?

MR. HORTON: At the present time we have not required that, Mr. Helman, because we have, No. 1, some fairly large dry gas fields close to our market centres where we are able to purchase gas on the basis that we can increase it in the winter and decrease it in the summer. Secondly,

we have a fairly large interruptible industrial load that can be turned off during the cold weather and these interruptible consumers will then use fuel lines and that gas is made available during winter.

Q. Why wouldn't you use these facilities at the time that the local customers require peak load gas?

MR. HORTON: We probably would.

. You probably would?

MR. HORTON: We would probably be using both.

Q. How did you arrive at this figure of 1.3 for peak load gas for the local consumers?

MR. HORTON: Well, it was related to one or two contracts that we have in California where we have the right to call for peak gas from producers and we pay that kind of a premium. Secondly, we felt that some kind of a premium should be paid for this stand-by service.

You see, we knew that in the case of the base load gas we would have some advance notice that permits planning as to what the quantities will be and we were quite willing to render that service to the utilities on a non-profit basis, just to recover our cost. As a matter of fact, when we rendered this peak load service it is quite likely that we won't recover our cost as

far as that goes, but we felt it was justified to have some premium for this peak load service which is really in the nature of a lifeboat; they don't have to take it and it is there if they need it.

Q. Was it calculated on any mathematical basis or just an additional profit your company wanted to make?

MR. HORTON: No, it is not an additional profit. As a matter of fact if we have to replace that peak load in California, assuming that peaks would come about the same time as yours here -- and that is not unlikely because winter hits us both about the same time -- if we have to replace a cubic foot of peak load gas that we have turned over to the local utilities it will cost us at a minimum twice as much, not 1.3, not 30 per cent more but 100 per cent more.

Q. But, Mr. Horton, you have already told me you had a storage field that you were going to have near San Francisco and you had large dry gas fields where you could just turn the tap off and on?

MR. HORTON: Yes, and when we turned on the tap of these dry fields we pay at the present time 38 cents. So we would be substituting 38-cent for ---

Q. Fifty-cent gas?

MR. HORTON: No, that is the point. For $14\frac{1}{2}$-cent gas probably because you see when you think in terms of 50 cents ---

Q. Yes.

MR. HORTON: --- you have got these transmission costs in there and they are going to continue. Those are fixed charges; they are going to be there and we will have to pay them even though we turn over peak load gas to the local utilities, so it is the out-of-pocket cost you look to.

Q. Well, what I am suggesting to you is that there is absolutely no additional cost by your using your dry gas fields and your storage fields near San Francisco to supply peak load requirements without you charging the local consumers an extra cent?

MR. HORTON: Well, I understand your suggestion on that but I am saying that is not so.

Q. Well, I see.

Let's get at another problem in connection with your supply. Your price in San Francisco has determined what you are paying locally for gas to the local producers as I understand your evidence.

MR. HORTON: Well, that is a little bit more than I think the evidence was. But I believe Mr. Moulton said that we had to take that into consideration among other things.

Q. Taking that into consideration you

arrive at a price that would be paid to the local producers here?

MR. HORTON: Well, it had to be financially feasible and we had to look at the price for which we could sell to our customers as one of the factors, of course.

Q. You have arrived at the price that all the producers are willing to accept with the exception of the Pembina field where you get a lower price?

MR. HORTON: Well, those producers that have contracts with us to date have been willing to accept it.

Q. And it is a uniform price all throughout, no matter where their gas field is situated?

MR. HORTON: Yes, that is substantially correct.

Q. I suggest to you that that is a monopoly price, that figure there, because you have just personally fixed that price and you have got them all to agree to it.

MR. HORTON: Well, I don't think that makes it a monopoly price; an attractive price might be the same thing.

Q. Yes, an attractive price might do the same thing but an attractive price might arrive at a monopoly. Nobody else can get gas for less than that right now, can they?

MR. HORTON: I wouldn't think so.

Q. And as you exhaust the immediately adjacent fields that there are on your line -- you have given us a list of them -- you are going to have to get gas from more distant fields?

MR. HORTON: Well, they would both be exhausted at the same time, Mr. Helman.

Q. Well, you will have to drill these other fields, won't you -- your additional -- these trends that you talk about will all have to be drilled, haven't they?

MR. HORTON: Well, I assume most of them will be drilled, yes.

Q. All I am saying is, as someone said to me the other day, that you are personally taking the gas and leaving the trends for the Alberta consumers but let's pass away from that idea.

MR. HORTON: I would like to speak to that.

THE CHAIRMAN: You don't need to.

MR. HELMAN: Q. As we get into this trend picture the gas is more and more expensive, isn't it, the drilling is deeper and it is more expensive, isn't it?

MR. HORTON: It could be.

Q. That will add to the price, to the cost of gas, won't it?

MR. HORTON: Well, the cost of gas in

our contracts is fixed right now.

Q. Well, thatis for the present reduction, but if you have new companies with new wells you will have to pay more, won't you?

MR. HORTON: Not necessarily.

Q. Will you have to pay more because there is deeper drilling?

MR. HORTON: Well, a good deal of these fields we have already contracts for on this price scale involves deeper drilling, so I can't see why that would require, deeper drilling would command a higher price necessarily.

Q. Let's for a moment look -- that is how you fixed your price in San Francisco, whilst the price goes up in San Francisco ---

MR. HORTON: Price for what?

Q. Price for gas to consumers?

MR. HORTON: Price that the ratepayers pay?

Q. That is a possibility, isn't it?

MR. HORTON: Well, that is so far as the double cost of doing business would increase ---

Q. That is as you are under the Federal Power Commission for rates or the local commission for rates in San Francisco?

MR. HORTON: We are under the California Public Utilities.

Q. Well, let's assume it costs you more to get gas close to San Francisco than you are presently

paying?

MR. HORTON: All right.

Q. You would then ask for more from your consumers, wouldn't you?

MR. HORTON: Assuming all other things remain fixed.

Q. What I am trying to get at is that ultimately that will reflect back and the price of gas will go up to the local consumers here?

MR,HORTON: No.

Q. You don't think so?

MR. HORTON: No.

THE CHAIRMAN: Thank you very much, Mr. Helman.

Mr. MacKimmie, is Mr. Black going to be here for a little while yet?

MR. MacKIMMIE: Just for the balance of the afternoon.

THE CHAIRMAN: We shall now have a ten-minute break.

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THE CHAIRMAN: Gentlemen, we shall now resume our hearing.

MR. PATTILLO: Mr. Chairman, Mr. MacKimmie has a few questions he would like to ask, and I suggest he ask them before any of the Commission ask their questions.

BY MR. MacKIMMIE:

Q. Mr. Horton, in the transcript, I believe in Saturday's evidence, the Chairman asked you if you had any conversation with Trans-Canada Pipe Lines with reference, as I interpret his question, to transmitting gas through a common system to different exporters. Do you recall that, sir?

MR. HORTON: Yes.

Q. Did you intend to convey the impression you had not had conversation with Trans-Canada Pipe Lines?

MR. HORTON: I would not convey that impression; we have had discussions, from time to time, about the gas supply in the light of their requirements and in the light of our requirements, but we have not had any discussions that would encompass what I interpret the scope of your question to be, Mr. Chairman.

Q. Now, Mr. Horton, when you were discussing this afternoon the reserves with Mr. Frawley, what you described as cushion gas for the

[illegible]

[illegible]

[illegible]

[illegible]

gas company requirements, would that be necessary in view of the contract -- would that reserve be kept, in view of the contract you have with the local utility company?

MR. HORTON: I would think that gas -- whatever reserves we have, they have first call throughout the life of our contract.

Q. Then, one more question: Mr. Hetherington, the other day, said he thought Mr. Kayser was modest in the contribution he stated to get the system going. Has P.G.E., one of the bigger customers of El Paso -- was the price passed on to you as a customer?

MR. HORTON: I would think so.

Q. Was the price passed on to you?

MR. HORTON: Any contributions Mr. Kayser would make, we would bear our share.

MR. FRAWLEY: Mr. Chairman, I would like to ask a question arising out of Mr. MacKimmie's question. I might be quite wrong, but I would like to put another question to Mr. Horton about Mr. Govier's cushion gas so that I will understand it.

Q. I understand, when you are trying to make a sort of balance sheet to see how much gas we have left, as we now see it we have left, to export -- and you have to regard Alberta's 30-year requirements -- 7.8 trillion and you put it somewhere between

[illegible]

11 and 12 trillion. Surely that is the purpose of Dr. Govier's statement to the Commission and, if it is not, please tell me what is wrong with it?

MR. HORTON: That may be the gist of what Dr. Govier said to the Commission, but the point I was trying to make, Mr. Frawley, was that if you are careful you can double up on this 4 trillion reserve of cushion gas, if that is the proper figure, but since the Alberta Utilities have first call under our gas adjustments, to us it becomes unnecessary to add to the reserves which we will have at all times to support our deliveries, another block of gas which we will call cushion gas.

Q. I think we are doing two separate problems in arithmetic but, as far as I understand, Dr. Govier's evidence certainly could not arrive at the amount that is still exportable or exportable today without taking into account the 3 or 4 trillion feet of cushion gas he speaks of. I will leave it at that.

THE CHAIRMAN: That is, if you take 30 years as your figure.

MR. PATTILLO: Mr. Chairman, may I ask one question I think I should have asked before.

Q. Mr. Horton, are there any officers of Pacific Gas & Electric or of these companies,

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Alberta and Southern, Pacific Gas Transmission, S. & M., who are directors or officers of any of the producing companies from whom you propose to buy gas and, if so, who are they and what companies are they directors of?

MR. HORTON: Mr. Black is a director of Shell Oil Company in the United States; our contracts here are with Canadian Shell, and other than that, to the best of my knowledge, Mr. Pattillo, none of our people who are officers and directors of the companies you have named are directors of the producing companies.

Q. Now, are there any of the officers or directors of the producing company that are directors of any of the companies I have named, Alberta and Southern, S. & M., Pacific Transmission or P.G. & E.?

MR. HORTON: I think not, no.

MR. PATTILLO: Thank you.

THE CHAIRMAN: Mr. Horton, I think that the members of the Commission have a few questions that they would like to ask for clarification and to get further information, and I do not think any one of us is quite sure who would be the right person to answer such a question. Perhaps, when the question is asked, it could be referred to the right person, Mr. MacKimmie.

Q. Have you made, as yet, any tentative

[illegible]

or other application to the Federal Power Commission for an import permit?

MR. HORTON: No, sir.

THE CHAIRMAN: Would you propose to do so before any resolution had been made in Canada with respect to an export permit?

MR. HORTON: Our plan, at the moment, Mr. Chairman, would be as soon as the Conservation Board has acted favourably on our application, we would then file with the appropriate regulatory body in Ottawa and with the Federal Power Commission, we would hope, more or less, simultaneously. That is our present plan.

THE CHAIRMAN: Well now, I think the Commission is prepared to take it as common knowledge that the State of Texas, in the United States, is a very prosperous State in the American Union of States.

MR. HORTON: Yes, sir.

THE CHAIRMAN: Could you or any member of your organization present here today tell us whether the export of gas from the State of Texas or from any of the other States has increased the price, in Texas or any of those other States, of gas to the local consumer?

MR. HORTON: I do not know, Mr. Chairman; the field prices, of course, have gone up over the years as a result of the exportation of gas

and the fact that gas in the ground, with these increased demands, has caused it to reach its more intrinsic value.

I just cannot say much more than that except to say to you, in California, at least, we know that the field price for gas is not the most significant component of cost in running services to the domestic consumer. With our other costs of distribution and administration, in general, taxes, both income and ad valorem and other components of cost, in total far exceed the field price.

THE CHAIRMAN: It would be fair to say, would it not, or could you say from personal knowledge, the price in States such as Texas, which are large exporting States, that there the price to the consumer, the local consumer, has increased considerably over the years?

MR. HORTON: I think that, perhaps, is so, but I cannot say, of my own knowledge or based on any studies that that is the result of increased prices in the field. You are assuming other factors, such as increased wages, increased taxes that have played such a large part in the increase to the domestic consumer that may have occurred during that period.

THE CHAIRMAN: You would not say, then, the price, necessarily, had gone up in the exporting State any more than in some other State that

was an importer?

MR. HORTON: As far as my opinion is concerned, I think that is a true statement.

THE CHAIRMAN: Well now, to change the subject, this morning you endeavoured to analyze for Mr. Pattillo the cost of getting an MCF of gas from your gathering system, from Alberta and Southern production down through the trunk line to S. & M. to the border of the United States. Do you recall that?

MR. HORTON: Yes.

THE CHAIRMAN: Would you be good enough, for the benefit of the Commission, to recapitulate that for us?

MR. HORTON: You mean to trace ---

THE CHAIRMAN: To re-state it because, as I recollect, you said -- and please correct me if I am wrong, because I am just going from memory -- you said that the Alberta Trunk would add part of its cost of transmission -- would include a 7 1/2 per cent return on its rate base, and you contemplate the same thing for S. & M., and I would like to start and trace that down and tell us what you would estimate those elements of cost to be; the 7 1/2 per cent on the rate base for Alberta Trunk and the 7 1/2 per cent on the rate base for S. & M.

MR. HORTON: I think Mr. Moulton has those

figures.

THE CHAIRMAN: Thank you.

MR. MOULTON: Mr. Chairman, the evidence shows that our estimate of what Trunk Line would invest in the facilities to pick up gas at the various fields and transport it to the Alberta Canadian border or, as to the 30 million, to the Montana border, is, in round figures, $95,535,000 with depreciation at the rate of 4 per cent per annum under the usual rate base method of procedure; in the first year, one-half a year's depreciation would be deducted so that in the second year of operation 1 1/2 year's, and so on. So, deducting 1/2 year's depreciation it amounts to about $1,900,000 and adding our estimate of working cash capital of $500,000 results in a first year rate base of about $94,000,000 on which 7 1/2 per cent return would be $7,100,000.

Is that it, sir?

THE CHAIRMAN: Yes, except that I would like that related to an MCF of gas, having regard to the volume you would be putting through at 90 per cent, is it, load factor?

MR. MOULTON: Yes, sir.

THE CHAIRMAN: In other words, I do not think it would be too difficult a calculation if one had the costs there. You end up at the border with a cost of your MCF of gas somewhere in the

vicinity of 29¢, as I recall it.

MR. MOULTON: Yes, sir.

THE CHAIRMAN: And you stated that included the figure to Alberta -- to the Trunk Line -- it does include 7 1/2 per cent of Alberta Trunk's rate base?

MR. MOULTON: Yes, sir. The total estimated cost, as shown on the table in the back of this Tab P, to which reference has been made, shows the estimated cost in the first year of operation of Alberta Gas Trunk Line to be a total of $15,394,000, or an average, for the volume of gas handled, 9.4¢ per MCF. Of that $15 million, about $7 million represents a return on the Trunk Line investment. The difference between the $15,394,000 and the $7,100,000 would be operation and maintenance expenses of the Trunk Line system, depreciation and taxes. So, on the basis of a total cost of 9.4¢, the portion of that which would be a return on the Trunk Line investment would be in the ratio of, approximately, 7/15ths of the total, or not far from 4 1/2¢ per MCF as representing the part of the cost attributable to the Trunk Line earning 7 1/2 per cent on its invested capital.

THE CHAIRMAN: Right. Then you have the same figures or calculation, rather, for S. & M.

MR. MOULTON: Yes, sir. The S. & M. investment is, approximately, $38 million and the

return on that at 7 1/2 per cent is, approximately, $2,900,000. Again, the exhibit shows the total costs of S. & M., $6,268,000, and the corresponding unit cost of 4.2¢ per MCF. The S. & M. return of $2,900,000 compares to the total cost of $6,200,000, therefore, the return element in the first year of operation represents about 2¢ per MCF.

THE CHAIRMAN: Thank you. Am I right in taking the 14.48¢ as the starting point on the figures you gave us this morning?

MR. MOULTON: Yes, sir, that is the estimated price to be paid for the gas purchased in the first year.

THE CHAIRMAN: Just so that it will be entirely clear, I do not want to press it, but just so that it will be entirely clear you add 14.48, 9.4 and 4.2 and get the estimated cost of the gas to the border inclusive of a 7 1/2 per cent return on the rate base to the Trunk Line, and the same rate return on the rate base to S. & M. Limited?

MR. MOULTON: Yes, sir.

THE CHAIRMAN: That is 28.08¢?

MR. MOULTON: Yes, and if we refer back to the table, there is an allowance of .68¢ for the purchasing and metering costs of Alberta and Southern that is not any return on investment; an out-of-pocket operating ---

THE CHAIRMAN: That is included in the 28.08 figure?

MR. MOULTON: That would be added to the 28.08; it is 28.76, and the exhibit shows 28.75.

THE CHAIRMAN: So you get 28.76, dead ---

MR. MOULTON: Dead reckoning, yes.

THE CHAIRMAN: Then, without any return on the rate base to either transmission company, you would deduct 6 1/2¢ from that?

MR. MOULTON: About that.

THE CHAIRMAN: 6.50, give or take 1/10th or something of a cent. Right?

MR. MOULTON: Yes.

THE CHAIRMAN: So you then come up with 22.26¢ at the border, am I right, per MCF of gas?

MR. MOULTON: Yes, sir.

THE CHAIRMAN: Thank you very much. Now, I wonder, while we have Mr. Black here, if the Commission could get the benefit of his vast experience in the Public Utility field, particularly in the distribution of natural gas and the transmission of natural gas in the United States. There is a question which I would like to put to him, Mr. MacKimmie, if Mr. Black does not mind.

MR. MacKIMMIE: I am sure Mr. Black would be delighted to give what help he can.

THE CHAIRMAN: Mr. Black, having regard to what I said, in your long lifetime of experience

in the distribution of natural gas in your country and the transmission of gas, would you be good enough to give us your opinion as to whether or not the Federal Power Commission in the United States and its regulatory authority has had a beneficial effect on the industry as a whole, and, also, on the consumer and on the producer of gas, in your country?

MR. BLACK: This is a rather ---

THE CHAIRMAN: It is a pretty broad question, but I would like you to be as frank as you can.

MR. BLACK: I think, on balance, the answer would be yes, certainly, the Federal Power Commission of the gas business under the Gas Act has provided -- has created some problems in respect to what might be considered dual regulation as between State Commissions and the Federal Power Commission; it has created some problems, or, some problems have been created for it by court decisions in respect to the admitted regulation of prices in the field -- production. I do not think that has been completely resolved yet. It is an area which our Commission evidently felt they should not occupy, but they have been told by the courts they must take jurisdiction over these field prices. In inter-state operation of pipelines, some sort of machinery, I think, would

have had to have been set up and, as of today, I do not know of any better way to have done it than has been done by the Act, which gave the Federal Power Commission jurisdiction over inter-state operations of pipeline companies and distribution companies and, apparently, also has given them jurisdiction over field prices, against their better judgment.

THE CHAIRMAN: So, in spite of having to live under the system, you feel, undoubtedly, it has been beneficial to industry as well as to the consumer and the producer?

MR. BLACK: I think so, but it has, of course, created a great many problems and they are not all solved yet.

THE CHAIRMAN: But without it, there might have been more problems?

MR. BLACK: I think that is probably correct. We have, for instance, an overlapping of jurisdiction where we buy gas from out-of-state. The Federal Power Commission and the California Public Commission both have jurisdiction over our contract at the state line. That jurisdiction may lead into further duplication and, I am sure, that not all of them have been entirely cleared up as yet, but on the whole we have been able to work with the problem, and I think the results have been good.

THE CHAIRMAN: I asked this question the other day, I think, of Mr. Kayser when he was here: Was there not some danger that once gas is exported to a particular area for a period of 20 years, or whatever the time of the permit may be, that tended to become a source of supply in which the people felt they had a vested interest? My recollection of Mr. Kayser's answer was that he was disposed to agree with that and cautioned that it would be wise in exporting energy of this kind to consider the type of market into which it was going. Presumably, I suppose to what he was referring was, if it was going to an area where large industries were going to be established on the basis of its existence rather than a residential area, and so on. Wou

Would you care to give the Commission your views on that?

MR. BLACK: If the sole source was interrupted, I think some such result might be anticipated. In our situation we have not only the California source, but we have, outside of California, one source at the present time, and I would think, as applied to this particular project that we are discussing, if we know at the beginning what the terms of the export permit are, which, of course, we would know, our financing, our rates are set on that basis and if near the end of that

term -- and that is a decision that would not be made overnight -- it would be foreseen by both sellers and purchasers years ahead of that time, if they were alert -- when the time came that it was necessary to discontinue that source of supply, for a valid reason, and the only one I can think of is that the supply was needed in Canada, I can see no problems whatsoever of a public relations nature.

I can see many problems ahead for our successor gas and electric companies in arranging their affairs to meet such an event. If it took place, it would not be a matter we would wake up to some morning and find we had to do something about it the next night. To that extent, I am afraid I would have to disagree with the conclusion you state.

THE CHAIRMAN: Thank you very much, sir.

MR. FRAWLEY: As this matter of F.P.C. regulation is more than of passing interest to me, I would like to ask some questions, if I may?

THE CHAIRMAN: I do not think Mr. Black wants to get himself -- and I do not intend to put him into a position where he is going to be cross-examined on the F.P.C. regulations, Mr. Frawley. I hope you did not have that in mind.

MR. FRAWLEY: Q. I would like to know how far the F.P.C. regulation goes, and I am only thinking of one thing, the regulation for field prices. Do I understand that Pacific Gas & Electric is regulated by the F.P.C. because it is engaged in inter-state transmission of gas?

MR. BLACK: No, Mr. Frawley. Pacific Gas & Electric is regulated by the California Public Utility Commission but, with respect to contracts we may make for the importation of out-of-state gas, the Federal Power Commission has jurisdiction over that.

Q. Then in the case of El Paso, for instance, because it is delivering out-of-state gas to your company, those transactions are the subject of the Federal Power Commission regulations?

MR. BLACK: That is correct.

Q. Is the price at which you pay El Paso regulated by the F.P.C.?

MR. BLACK: Yes, sir.

Q. Is that one of the things you say has given rise to problems which have not yet been solved?

MR. BLACK: No, I wouldn't think so. That is within the normal problems of all regulation.

Q. The gas-producing States then have to deal with the F.P.C. in the matter of regula-

tion of field price?

MR. BLACK: Now you are talking about field price.

Q. Yes.

MR. BLACK: I am not competent to answer your question on that.

Q. Perhaps I could ask a further question: does the F.P.C. purport to regulate the field price?

MR. BLACK: They were told by the Courts that that is one of their obligations. What they have been able to do about it I am not competent to answer.

Q. Do you know whether they have started or not to do that?

MR. BLACK: I don't think I can answer that.

MR. FRAWLEY: Well, I did not want to go any further into it than that.

THE CHAIRMAN: Can you tell us, in a few words, what the so-called Memphis case is about?

MR. BLACK: I think that is a lawyer's question. Mr. Peterson is here and he can probably answer it.

THE CHAIRMAN: I think the Commission would like to know. I think we have a general idea but we would like to hear about it.

MR. BLACK: I will give the layman's version of it.

THE CHAIRMAN: That is all we want.

MR. BLACK: The Natural Gas Act has its own procedure for the determination of rates. One is similar to that of the California Public Utilities Commission, where, however, the fields wanting an adjustment come in and make an application to the Commission, in which there is a hearing and all interested parties involved take part in the hearing and the Commission makes a decision.

The other procedure, under the Natural Gas Act, is that the pipeline company can give notice to the Federal Power Commission when it desires to increase a rate by so much and file a new tariff. After an interval of -- may I check with Mr. Peterson on the duration of the interval?

THE CHAIRMAN: Certainly.

MR. BLACK: After an interval of six months, maximum, and if the Power Commission does not object, or if it does object, the rate becomes effective.

If the Power Commission is not satisfied with the rate, it becomes effective under the requirement that when the formal hearing and formal decision of the Commission has been made, that if a refund is in order to the pipeline company's consumers, it will be made.

[illegible]

That is the procedure that has been followed by the pipeline companies in obtaining rate increases.

The Supreme Court has said that, in the absence of a unanimous consent of all the consumers of the pipeline, that is not the proper procedure to follow.

Mr. Peterson has corrected me. That is a Circuit Court decision, now on appeal to the Supreme Court.

It is purely a question as to which is the proper procedure. If pipeline companies are required to lay a case before the rate goes into effect, it may be that they will have to take a little punishment on earnings. I think, actually, it has very little to do with matters here except the validity of those decisions which have already been made and which the Circuit Court says is an improper procedure.

I am over my head a little bit, Mr. Chairman.

THE CHAIRMAN: Just to put it briefly, it has put things in a turmoil, in industry. Thank you.

MR. BLACK: There is one other point I would like to touch on, Mr. Chairman. We have said, from the inception of this project of ours, that we have recognized the prior position of

Canadian customers, not only Alberta customers but Canadian customers. We tried to conduct ourselves in such a way that we would not interfere with the operation of that policy in respect to local customers and in respect to customers who might be served by the Trans-Canada Pipe Line.

I have just learned that -- probably I am behind in the procession -- that a new survey by Trans-Canada Pipe Line Company of their Canadian market increases the amount of gas they feel they should buy something in the order of 100 million to 200 million feet in order to take care of those markets.

That 100 million to 200 million cubic feet is in addition to the amounts which we understood were sufficient to afford Trans-Canada's needs in the immediate future.

As a specific matter, we want the Commission to know that we wish and will co-operate with Trans-Canada in the arranging for their acquisition of the 100 million to 200 million feet per day that they have indicated that they require for this purpose from gas presumably uncommitted in Alberta and from gas we presently or potentially have on contract, over and above the 450 million cubic feet a day necessary to get our project launched.

The gas which may be desired for this

purpose and in this amount, of course, will take priority over any future additional export requirements of Alberta and Southern.

THE CHAIRMAN: Thank you very, very much for that statement. The Commission is very happy to know that, Mr. Black, and we appreciate the spirit in which it is made.

MR. BLACK: Thank you, sir. On behalf of myself and my associates I want to express our very deep appreciation of the courtesy and patience with which you and your associates have heard us during this presentation.

THE CHAIRMAN: Thank you, sir.

I do not think your associates are all through yet. I think some of the members of the Commission have some further questions.

Dr. Hardy, have you some questions?

MR. COMMISSIONER HARDY: Mr. Chairman, I would like to ask a question of Mr. Horton.

On page 20 of the brief there is a section on the benefits to gas consumers of Alberta and there are a few benefits listed under numbers, and in paragraph one it states, "A long-term gas supply is provided at an advantageous price."

Now, as I have followed the briefs and the testimony that has been given, I am quite satisfied with the statement as to the long-term supply; but on the second statement, "at an

advantageous price," and reading the brief, you could come to a number of conclusions as to just what the advantages are, and there seems to be some doubt as to whether any of those advantages are concerned with the absolute price to the Alberta consumer.

I was wondering if Mr. Horton could amplify for a bit as to the main points they had in mind in making this statement as to advantageous price.

MR. HORTON: What I intended to convey, Mr. Hardy, is that in order to obtain a long-term cost supply for the use of the local utilities and, in turn, their customers, you have to either do it by contracting for the gas or by purchasing gas in the ground, and I think the latter is easily disposed of as being a very expensive way to obtain long-term gas supplies.

So, turning to the matter of contract, as distinguished from purchasing in the ground, it is our judgment that if the local utilities had to firm up their long-term gas supply by contract, in a way that would affect their load factor requirements, doing so for their own account, they, of necessity would have to pay a higher price to producers than that which we are able to pay because of our high load factor operation, and, to that extent, since we then will turn around and re-sell the gas to them, at cost, they got

[illegible]

the direct advantage of the lower price that comes from a high load factor purchase arrangement.

Now, that is my conclusion.

MR. COMMISSIONER HARDY: Thank you. That is all.

MR. COMMISSIONER HOWLAND: Could I follow through a little more on that question?

An estimate by Dr. Harries, I think, indicated that over a period up to 1965, income per family in Alberta was going up by $228.22, which is a good calculation. That should be, or should it not be, balanced by this increased consumer cost?

MR. HORTON: Yes, sir, I would think so.

MR. COMMISSIONER HOWLAND: It is not a balanced figure, in other words?

MR. MacKIMMIE: I wonder if Dr. Harries might not be here to answer that, sir?

DR. HARRIES: I think, sir, it depends on what adjustment you make in increasing the price as a result of export. Certainly, in our opinion, as of this time there has been no increase in the domestic price as a result of export. Whether, in the future there would be is a matter that we do not have an opinion on because we have not studied it.

MR. COMMISSIONER HOWLAND: You make an estimate on the other side and should you not make

an estimate on the other one and then balance it, or do you not think that prices will go up?

DR. HARRIES: I can only repeat what I have said, sir. In our opinion they have not run up to this point. We have not studied the matter as to the future.

MR. COMMISSIONER HOWLAND: There is one other question, while you are there, if you would not mind, Dr. Harries:

In the measuring of the impact of exported gas on the Provincial economy, would you feel that -- maybe I cannot ask you this, because you did not answer the other one, but I will try it, if I may:

Would you think you should have a look at the possibility of rising prices to the producer? You tend to divert gas into the high-priced markets, high-priced uses, away from low-priced uses?

I am thinking that in parts of Alberta, apparently, you cannot afford to burn oil for space heating or coal for power generation. Would the fact of higher prices tend to lead to a different type of allocation of energy resources?

DR. HARRIES: Yes, there does not seem to be any doubt that there will be a structural change. Energy sources within Alberta and, indeed, within Canada has a result on export; but the magnitude of any change, sir, I could not estimate because we have not studied it.

[illegible]

MR. COMMISSIONER HOWLAND: Just a couple more questions, Mr. Chairman, if I may.

It was very interesting, Mr. Horton, to the discussions about the pricing system of gas from Alberta and Southern, right down to P.G. & E. It was impressive to find that you had been from Alberta Southern and making a profit. You have been asked to climb all over the place in answering questions. Can you climb over and become a Canadian for a moment and tell me whether it is a most desirable arrangement from the point of view of the Canadian economy?

MR. HORTON: I am not sure, Mr. Howland, I understand the question.

MR. COMMISSIONER HOWLAND: Let me put it quite frankly; I am not trying to hide anything. I am looking at it from the taxation point of view.

MR. HORTON: Yes, I see.

MR. COMMISSIONER HOWLAND: That if you were making a profit in Canada, Alberta and Southern, maybe Canada ought to collect some tax. I am not arguing that aspect. I am asking whether you have considered this aspect?

MR. HORTON: I see your question now, and all I can say is that the design of the contractual arrangement was not set up for the purpose of reducing our taxes in Canada. Rather it was the

result of the fact -- well, there are two reasons; one, we knew that the Federal Power Commission would require Pacific Gas Transmission to establish its rates in early years on the cost of the service base because they didn't have any previous experience to go on to permit rate royalties to be established in any other way, and that being so we thought we should carry that concept right back to the field system, the cost really would be paid and passed on to the gas company, and as I have said earlier as far as P.G. & E. was concerned it was interested in paying the cost and no more. So that there seems to be little point in trying to build into Alberta and Southern, the producing company, an element of profit because what profits are made were just turned back in dividends to its parent company, the P.G. & E., and at the same time increased the cost of gas.

MR. COMMISSIONER HOWLAND: Just one other question: the 49¢ price, as you calculated it to be at Antioch, this is, I gather, very largely, the reflection of increasing demand, as it were?

MR. HORTON: Yes.

MR. COMMISSIONER HOWLAND: Does it reflect also, or to what extent does it reflect the reserve situation that you are facing there in California? What I am getting at is, it possibly could reflect a shortage of reserves,

forseeable reserves at that price?

MR. HORTON: Well, indirectly I suppose the answer is yes because we are short of gas; our supplies in California are declining; the volume we expect to obtain from El Paso in future will remain fairly constant as we see it, and therefore we have to come to Canada to augment these supplies and it has cost us more money, namely, 49¢ in initial years. If, on the other hand, the California reserves were increasing rather than decreasing, perhaps we wouldn't have to consider this move.

MR. COMMISSIONER HOWLAND: That is our good fortune, I gather.

MR. HORTON: I think so.

MR. COMMISSIONER CUSHING: I would like to come back to the question the Chairman asked you, Mr. Horton, about the Federal Power Commission and ask you first is there any regulated time schedule of the F.P.C. in the processing of applications? Why I ask that is that in other submissions before our Commission it has been indicated that it is rather a lengthy process. Maybe that's what Mr. Black was referring to when he said it created a problem. Well, in your statement, in your scheduling you would apparently anticipate that all these problems would be cleaned up by the end of 1958 so you could start construc-

tion early in 1959?

MR. HORTON: That is our hope, Mr. Cushing. There are those who, in addition to ourselves, I suppose, that have had experience with the Federal Power Commission that would indicate they didn't always move as quickly as you would hope.

MR. COMMISSIONER CUSHING: Certainly this would be complicated even more so if there happened to be intervenor?

MR. HORTON: I would think so.

MR. COMMISSIONER CUSHING: So there might be a question mark put behind this matter of being able to start construction early in 1959?

MR. HORTON: Yes, it is by no means sure; that is our target.

MR. COMMISSIONER CUSHING: I thought it was made clear from the questioning -- it is not in your submission -- that you are serving as a purchasing agent, if I might use that term, for the Alberta utility companies. I think that came out in the questioning this morning and by so doing you are providing a service to the utility companies in this Province. Isn't that right?

MR. HORTON: I think that is fairly well put.

MR. COMMISSIONER CUSHING: I don't recall any price being quoted for the Pembina price. Is

there a price established for Pembina?

MR. HORTON: Our field price in Pembina is about 15 per cent below the price schedule that Mr. Moulton read into the record for dry gas at the operating treating plant. The reason for that is that the Pembina gas rate of production is merely a product of how fast the oil comes out of the ground. We have no guarantee of any delivery rates or, indeed, delivery. So we price it at about 15 per cent less than that schedule.

MR. COMMISSIONER CUSHING: And all of that production, as I understand from the submission of the utility companies the other day, is designated for the utility companies. Isn't that right?

MR. HORTON: I would answer you in this way, that at the moment, or I should say this year and until such time as our project is in being, the Northwestern Utility will physically take that gas, you might say, to fit our needs. We have a contract and then when our project is in being Pembina gas may or may not physically be that which goes into their system to meet any deficiency they might have.

MR. COMMISSIONER CUSHING: It will all be owned by Alberta Southern in the trunk line and be hard to know whether the Pembina gas got to Edmonton or not?

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MR. HORTON: That is correct.

MR. COMMISSIONER CUSHING: On page 17 -- these are some of the results of your project again, number 2 paragraph -- Dr. Howland dealt with this; it is a page about the calculation for these eight years, "$228.22 per year for every family for the next eight years." The same question prevails in item 6 and 9, the page where you calculate the Provincial government revenues from royalties for the period 1958 to 1965. Is there any significance to that 8-year period?

MR. HORTON: The only significance at all is that I believe these were our instructions to Dr. Harries, just to take at least some reasonable initial period and to meter the impact, and the assumption was that it would be fair to take that as an indication over the length of the project of what the benefits might be; it was purely arbitrary.

MR. COMMISSIONER CUSHING: Certainly if there was no change in Provincial government royalty rights it would carry on for the term of the contract, wouldn't it?

MR. HORTON: Yes, indeed.

MR. COMMISSIONER CUSHING: Just one other question: on page 19 under item 8 you say, "Remaining after adjusting for payments from Canada to the U.S.". This is the flow of money

for the gas from the United States to Canada. I wondered why you had said just what you did there in brackets?

MR. HORTON: The reason for that is that actually I think one of the exhibits shows Pacific Gas Transmission will be paying to Alberta and Southern for the gas it sells at the international border something like $46 million per year, but upon analysis we find that all of the $46 million doesn't stay in Canada. Therefore it wouldn't be proper to give full credit of that amount in creating a trade balance. So it is the net figure after analyzing the various components of that cost.

MR. COMMISSIONER CUSHING: Why wouldn't the $46 million stay in Canada? Where would it go? This, I understand, is over the life of the contract. It is the payment flowing from the United States to Canada for the gas?

MR. HORTON: Yes.

MR. COMMISSIONER CUSHING: Over the life of the contract?

MR. HORTON: Yes.

MR. COMMISSIONER CUSHING: Now, you figure the gross would be $46 million. It would appear, then, that there is $23 million going to flow for the adjusting payment from Canada to the United States?

THE CHAIRMAN: There will be a dividend on there, a dividend, earned interest ---

MR. HORTON: Yes, that is correct, earned interest, and some of the components of that nature, that we don't feel it would be fair to stay here in Canada.

MR. COMMISSIONER CUSHING: I see. Actually the gross value of the gas would be approximately double this $23 million?

MR. HORTON: That is correct.

MR. COMMISSIONER CUSHING: Thank you.

MR. COMMISSIONER BRITNELL: Just points of clarification; this is on pages 7 and 8, paragraphs 4 and 5 of the section on corporate functions. I gather from these sections that S. & M. may retransport the gas for Alberta and Southern, that is, it doesn't get into the business of buying or selling gas at all?

MR. HORTON: That is correct.

MR. COMMISSIONER BRITNELL: Well, you have across the border the Pacific Gas Transmission Company apparently buys gas from Alberta and Southern, transports it for the length of its pipeline, then sells the gas to P.G. & E. I merely wondered why the difference in approach south of as against north of the border, that is, why P.G. & E. does not perform this function in exactly the same manner as S. & M.?

MR. HORTON: My recollection is that one time we really did consider that Pacific Gas & Electric Company might buy the gas at the international boundary and have it transported for it through Pacific Gas Transmission. However, upon examination we found that if it was handled in that manner it might very well put Pacific Electric & Gas Company under the complete jurisdiction of the Federal Power Commission and get back, get right back into this dual regulation that has been discussed here today. So it seems that exactly the same purpose could be accomplished by shaping it up in the way we did.

MR. FRAWLEY: Q. P.G. & E. doesn't particularly like the F.P.C. jurisdiction?

MR. HORTON: No, I wouldn't say that. We don't like dual regulation; that is time-consuming and costly.

MR. COMMISSIONER BRITNELL: I think I must have missed something on the way, despite the assistance of my good friend, Mr. Frawley. I understand that Canadian gas delivered at Antioch to the coast in the neighbourhood of 49¢ as against gas from El Paso at 34¢. So that Canadian gas on this arithmetic would be more expensive by about 15¢, and I wondered whether the difference isn't a fairly heavy price to pay for what is no more than a measure of independence

from El Paso and, in other words, whether the California Utilities Commission would consider it reasonable to bring in Canadian gas at 49¢ so long as gas was available at a lower figure or at some figure between 34¢ and 49¢, which might stimulate the development of reserves in other precincts closer to the market?

MR. HORTON: Well, sir, that is a very good question, and I think the answer to it is probably something like this; in the first place, we don't think that the 49¢ delivery price in the Bay area necessarily is an enduring fact. It would be our hope that as time goes on the stimulus that would come from this project would permit you here in Canada to see your way clear to permit us to enlarge the take, that is, gas surplus in Canada, as we have stated. When we do that we will adjust our transmission cost to a point where it might be something like 40¢; that is part of it. The other part of the answer is we think that both the California and Public Utilities Commission and the Federal Power Commission will give very, very serious consideration to the real value of this project to us on the basis that it is simply good business not to have all your eggs in one basket, whether you are talking about natural gas or bread or anything else.

It is a little bit more than just being a second source of supply in Canada as compared to the supply we are now getting from El Paso. We think both of those regulatory bodies will agree with us that there is a real value to having a direct contact with the producer through pipeline facilities that are under our control. We have found that that can be very, very important.

You might say, "Well, supposing you get this additional supply of gas from El Paso through the Pacific Northwest and Westcoast systems from Canada, another Canadian source of supply." But we were dealing with these producers and, when there is a time when we do not have any supply between those different sources, we place a charge on that; and, finally, from a third standpoint, I should say we have no assurance at all that the present 34-cent price of El Paso in the Bay area will stay where it is. In fact, the history has been that it has increased year by year.

THE CHAIRMAN: Thank you very much. Your comments have been very welcome indeed.

MR. COMMISSIONER BRITNELL: Mr. Chairman, I have one question on a matter that has not been referred to in these deliberations.

In calculating the increasing future gas requirements over a 30-year period for power

needs that you inquired into, do you consider that nuclear power will have any place in satisfying those power needs so that the question of the supply of gas would be altered to that extent; that is, nuclear power, atomic or the impending hydrogen power?

MR. HORTON: I would say our present view is that while nuclear power will occupy an important place down the road in our energy resources for our electric systems, it will not develop to the extent that it would replace any of the energy needs that are involved in this export project or in the gas requirements that we now obtain from California and El Paso.

MR. COMMISSIONER BRITNELL: Over a 30-year period?

MR. HORTON: Over a 30-year period.

MR. COMMISSIONER BRITNELL: Well, I presume you have had the reports of the British experiments at Calder Hall and others?

My understanding is that while hydro electric power can be produced, let us say, in the Bonneville Power Administration or even at Kitimat at 2 mills per kilowatt, inside ten years or even less they will produce manufactured power of between 7 and 8 mills per kilowatt.

Now, I don't know the relationship of gas, but you will understand the point I am dealing with?

MR. HORTON: Yes, sir.

MR. COMMISSIONER BRITNELL: Have you any information or is it a matter, in your opinion, of consequence?

MR. HORTON: What I was endeavouring to say is that whatever those developments are, sir, they will not replace the needs we now have for gas, either in this project or from out-of-state.

In further explanation of that, we seek this gas primarily for our firm domestic requirements. We also sell some portion of it in the consumer areas to interruptible customers, customers like cement plants, processing plants, and beet sugar factories and so on, none of whom I don't believe, will be involved with nuclear power or energy from that source as replacing their needs for gas or fuel oil.

MR. COMMISSIONER BRITNELL: Again, may I repeat, over a 30-year period?

MR. HORTON: Yes.

MR. COMMISSIONER LEVESQUE: Mr. Horton, regarding the option of which you spoke and the participation of Canadians in the matter of financing this project, would your underwriters accept a clause where they would have to offer these shares first to Canadians?

MR. HORTON: I think they would accept a clause of the type that we have used in California

with respect to the sale of our securities there. We, as a matter of control, in Pacific Gas and Electric, want to sell as much stock, place as much of our securities in California as possible. We have recognized, however, that as a practical matter it would be wrong and probably more costly to say to the underwriters, "You must give Californians the first right of refusal of P. G. and E. securities."

What we do is, rather, to say, "You must use your best efforts to place these securities in California, consistent with the demand for them," and then we leave it to their judgment to work it out.

What I propose we do here in contracts and agreements we make with all of our underwriters is that we should ask them to take on a "best effort" clause of that kind, and I think that would accomplish the purpose and intent that has been expressed here in these hearings.

MR. COMMISSIONER LEVESQUE: Will they be voting shares, "A" or "B" stocks or, like Alberta, 2,000 shares of voting and 8 million shares of non-voting?

MR. HORTON: No, sir. We do not anticipate there will be any difference in the shares that go to Canadians and the others.

THE CHAIRMAN: Well, thank you very,

very much, Mr. Horton, and your colleagues and associates, not only for the clarity of the brief which you have submitted to the Commission but also for the frankness with which all of you have answered questions and done your best to give us whatever information we have sought from you. We appreciate that and thank you so much.

MR. HORTON: You are very welcome. It has been a real privilege.

MR. MacKIMMIE: Before we rise, Mr. Chairman, I wonder, sir, if, at a later date, as it had been my plan to attend and hear other submissions, if I might apply to Mr. Pattillo if I think Mr. Horton can assist in the light of later submissions that come along?

THE CHAIRMAN: I would say it is the desire of this Commission to get information from whatever sources it sees fit, any information bearing on its Terms of Reference. I think, Mr. MacKimmie, I would leave it for you to work that out with counsel for the Commission.

MR. MacKIMMIE: Thank you, Mr.Chairman.

THE CHAIRMAN: Gentlemen, the hearing of the Commission is adjourned until tomorrow morning at 9.45, when we will resume with the presentation of the Westcoast Transmission Company.

---Whereupon the hearing adjourned, at 4.45 p.m., until 9.45 a.m., Tuesday, February 18, 1958.

ROYAL COMMISSION

ON

ENERGY

HEARINGS

HELD AT

CALGARY,

ALTA.

VOLUME No.: 12 **DATE:** FEB 18 1958

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ROYAL COMMISSION

ON

ENERGY

Hearings held at Calgary, commencing Monday, February 3, 1958, at 10.00 A.M.

PRESENT:

Mr. H. Borden, C.M.G., Q.C.	--	Chairman
Mr. J.L. Levesque,	--	Member
Mr. G.E. Britnell,	--	Member
Mr. G.G. Cushing,	--	Member
Mr. R.D. Howland,	--	Member
Mr. L.J. Ladner, Q.C.	--	Member
Dr. R.M. Hardy,	--	Member

COMMISSION COUNSEL:

Mr. A.S. Pattillo, Q.C.

Mr. Miles H. Patterson.

Mr. J.F. Parkinson -- Secretary to the Commission.

Major N. Lafrance -- Assistant Secretary to the Commission.

APPEARANCES:

Representing Westcoast Transmission Company Limited:

Mr. E.J. Chambers, Q.C.	-	Counsel
Mr. Webster McDonald	-	Associate Counsel
Mr. D.P. McDonald, Q.C.	-	Managing Director of Westcoast Transmission Company Limited
Mr. C.R. Hetherington	-	Vice-President of Westcoast Transmission Company Limited

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EXHIBITS		Page

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Tuesday,
February 18, 1958.

---On resuming at 9.45 a.m.

THE CHAIRMAN: Gentlemen, the Commission will now resume its hearings. Mr. Pattillo?

MR. PATTILLO: Mr. Chairman, Mr. MacKimmie has something which he wishes to say to the Commission before we proceed with Westcoast.

MR. MacKIMMIE: Sir, yesterday afternoon Mr. Pattillo questioned Mr. Horton as to which directors of our companies sat on the boards of any of the producer companies; and Mr. Horton's answer was that, as far as he knew, Mr. Black was a director of Shell American. It appears that Mr. Carl O. Nickle, who is a director of Alberta and Southern, is also a director of Bailey Selburn Oil and Gas with whom we have a contract.

THE CHAIRMAN: Thank you very much, Mr. MacKimmie.

MR. PATTILLO: Mr. Chairman, we will now resume the hearing relating to Westcoast Transmission, and I understand from Mr. Chambers that they have a statement which they wish to read into the record at the commencement of the hearings today.

MR. CHAMBERS: If the Commission pleases, arising out of some of the matters that were discussed last week, Westcoast have what we call a supplementary

statement, and I would like to have that read and tendered as an exhibit.

THE CHAIRMAN: That is this statement which has just been handed to us?

MR. PATTILLO: It is headed Supplementary Statement, and it contains ten pages, and that should be marked as Exhibit C-18-1.

THE CHAIRMAN: Yes.

---EXHIBIT NO. C-18-1: Supplementary Statement by Westcoast Transmission.

MR. McDONALD: My statement is as follows;

Mr. Chairman:

Westcoast included in its brief a statement of capital structure of the Company as requested by Commission Counsel.

However, it is obvious from the questions of the Commission Counsel on Friday last that the Commission desires not only a statement of the capital structure of the Company, but a statement of its financial history which for some years has been a matter of public information and record.

The Westcoast project contained the same elements of risk which are inherent, in the initial stages, of the exploration for, and development of, natural resources in Canada. Every mining company and, in particular, every uranium mining company, every oil and gas company, is a pioneer

venture as was the Westcoast project. It is submitted the same standard, with respect to the evaluation of the risks incurred and the imagination and tenacity of purpose required to develop such an undertaking, should be applicable to the Westcoast project.

Dealing first with the issue of 625,000 shares discussed on Friday: 500,000 shares were issued in February, 1953 at a time when the Company did not have tangible assets. The actual value of the shares could be said to be nil. The shares were issued for a nominal price of 5¢. In April 1955, even though it had a contract with Pacific Northwest entered into in December 1954, the additional 125,000 shares issued still did not have a tangible value. None of these shares was issued to anyone other than the original shareholders of the Company.

The fact is none of the 625,000 shares issued as above mentioned acquired a real value until May 1, 1956, when the financing of the project was consummated. Up to that date the Company had no assured future and any investment in time and money by any of the shareholders was made entirely at the risk of completing financing.

As of May 1, 1956, expenditures made and expenditures committed exceeded the total sum of $40,000,000. These expenditures were possible

only, I submit, because of the integrity, good business sense and reputation of the directors and shareholders of the Company.

On May 1, 1956, the 625,000 shares may be said to have obtained a market value of $5.00, the price of the shares then issued by way of initial financing. However, it should be borne in mind that the record of the shareholdings of Frank M. McMahon show he backed his faith in the venture by purchasing on May 1, 1956 additional shares at the initial price of $5.00. The prospectuses show that Mr. McMahon purchased 225,812 shares at the price of $5.00 in the total amount of $1,129,060.00 cash. In the result the actual per share cost to Mr. McMahon of his total holdings of 300,000 shares as shown in the prospectuses of September 11, 1957, was 74,188 shares at 5¢ plus 225,812 shares at $5.00, or an average of $3.78 per share. This cost of $3.78 per share exceeds 75% of the initial offering price of the shares, namely, $5.00. It is this sum of $3.78 per share which, I respectfully submit, should be taken into account by this Commission.

On Friday afternoon I did not have an opportunity to bring to the attention of the Commission possibly one of the important features of this financing, namely, the voting control of a Canadian enterprise by Canadians in the interests

[illegible]

of Canada as a nation.

The issue of the 625,000 shares above mentioned plays a large part in this feature of Canadian control of Westcoast. It will be observed that from 1948 to the present Canadians have retained voting control and actual management of the Westcoast project. I can record for the information of the Commission that the United States participants, namely, Sunray Oil Company and Eastman Dillon & Co., wholeheartedly agreed, at every step in the progress of the Company's fortunes, with this stipulation laid down by Mr. McMahon as a condition of their participation in the project.

The issue of the 125,000 shares in April, 1955, and the granting of the option to Mr. Frank McMahon to purchase 200,000 shares at 20% above the price of the shares at the time of initial financing are directly connected to the matter of control of the Company. The option granted December 11, 1954, to Pacific Northwest to acquire 25% of the outstanding shares of the Company at the time of initial financing placed in the hands of one shareholder a number of shares which in many Companies could mean effective control. This feature seriously concerned every Canadian director of the Company. One method to offset this possibility of losing

Canadian control of the Company was to issue additional shares to the then shareholders and further to ensure control to grant options covering 400,000 shares. At this time it was agreed between the then shareholders of the Company that all of the shares outstanding and all of the shares to be acquired by them during the course of the financing of the Company be placed in a Voting Trust controlled by Canadians.

Accordingly, as of May 9, 1955, the Westcoast Voting Trust was entered into. This Voting Trust is described in some detail in the brief in Appendix A. It will be noted that four Canadians out of six trustees have control of the Voting Trust

I know of no other Canadian Company, of comparable importance in the economy of Canada, which can show as complete control by Canadians.

Of the present four Canadian trustees, three, namely, Frank M. McMahon, George L. McMahon and D. P. McDonald, were born in the Kootenay area of British Columbia, and have resided in Alberta and British Columbia throughout their business careers. Mr. Norman R. Whittall, a Canadian citizen, has been resident and in business in Vancouver since 1910.

If this original group of shareholders of Westcoast had not had the fortitude, first to explore and prove up the gas reserves of the Peace River, and secondly obtain a market for the gas in the Pacific Coastal States against determined competitors, then there might not have been the development in the northern area of Canada of a new industry and all the benefits to Canada described in Section One of the brief would have been delayed indefinitely.

Including the original issue of the shares of the Company discussed on Friday, the options referred to above and the shares sold in May, 1956, and January, 1957, the records of the Company disclose:

	Number of Shares	
	Total Shares	Percentage
Canadian	3,579,867	60.64
United States	2,009,432	34.04
Other	314,006	5.32
	5,903,305	100

	Ledger Entries		
	Number	Percentage	Average Holding per Ledger Entry
Canadian	12,971	75.43	276
United States	4,014	23.34	501
Other	211	1.23	1,488
	17,196	100	343

The percentage of outstanding capital stock of Westcoast deposited in Voting Trust is as follows:

Number of Shares Outstanding	Shares Deposited	
	Number	Percentage
5,903,305	3,898,308	66.036%

THE CHAIRMAN: As of what date?

MR. McDONALD: January 6, 1958. This is information, of course, as supplied by the Registrar of the company, the Montreal Trust Company.

I might also add, Mr. Chairman, that in the subordinate convertible debenture indenture under which the holders of the convertible debenture are entitled to convert shares, they must convert their shares and receive only voting trust certificates, so that stock of 7 million and some thousand shares reserved for that particular group of prospective shareholders will also come under the voting trust.

THE CHAIRMAN: Is Westcoast a subsidiary of Northwest?

MR. McDONALD: Yes, Mr. Chairman. I intended to note that; that is a totally-owned subsidiary of Pacific Northwest with option granted December 11th, 1954, and it was transferred to Westcoast Corporation. This is a wholly-owned subsidiary and it was the Westcoast subsidiary that exercised the option subsequently as Mr. Kayser stated. Some 50,000 shares were transferred, I think; the prospectus discloses these shares are

held in the name of some trust company under the internal financial arrangements of Pacific Northwest.

I think I should add here a further statement with regard to Pacific Petroleums Limited. Pacific Petroleums Limited owns as of January 1st, 1958, 1,582,915 shares of Westcoast, which is 26.814 per cent of 5,903,305 shares outstanding.

In view of the questions to Mr. Kayser as to the percentage interest of Pacific Northwest and El Paso in Westcoast voting shares, I tabulate the interest as follows:

Westcoast Investment Corporation	1,077,750
El Paso Natural Gas Company	50,000
Total	1,127,750

That was the equivalent of 25 per cent of the outstanding shares at the completion of the sale of shares on May 1, 1956.

Equal to 19.103 per cent of the shares of Westcoast outstanding.

The distribution of the share capital of Westcoast as of January 6, 1958, is as follows:

Issued for cash:	4,825,390 shares
Issued for properties:	1,077,915 shares
Total	5,903,305 shares

For the 4,825,390 shares relevant to the pipeline and issued for cash the company received $23,112,469.00, as follows:

[illegible]

	shares	
Prior to financing:	625,000	$ 31,247
Issued May 1, 1956:	3,886,000	19,340,591
Issued January, 1957:	105,000	2,523,281
Option shares issued:	209,390	1,217,350
Total		$23,112,469

I might say, Mr. Chairman, the dollars are Canadian dollars, as noted in my brief. Any securities issued for United States funds were converted at the date of issue into Canadian funds for the purpose of this presentation.

THE CHAIRMAN: Would you wrap that up for us?

MR. McDONALD: The total amount of money obtained was $23,112,469.

THE CHAIRMAN: We have the recapitulation. I take it that the first column refers to -- 625,000 shares, $31,247.00 -- those are the so-called 5-cent shares?

MR. McDONALD: I would be glad to point that out.

THE CHAIRMAN: It is quite simple.

MR. McDONALD: Yes. The 625,000 rate per share was, approximately 5¢. 3 million sold for $5 per share, United States funds. The 105,000 shares were sold for $25, United States funds. The 209,390 were sold for $6, United States funds, to the extent that the Eastman Dillon group exercised their option; to the extent that Mr. McMahon's option

has been exercised the amount of Canadian funds is $5.97, which was an adjustment at the prevailing rate of exchange of May 1, 1956.

THE CHAIRMAN: Would you refresh my memory -- the 105,000 shares sold for $25 a share (U.S.), was that a share issue?

MR. McDONALD: I would be glad to give that: in January, 1957, the company had what was called a second advancement which involved -- there was not a prospectus issued, Mr. Chairman. I did not file a formal prospectus under the Canadian Companies Act but 105,000 shares were sold by private trading in New York to three, four or five individuals.

THE CHAIRMAN: Am I right in assuming no opportunity was given to Canadians to purchase those shares?

MR. McDONALD: I would say so. That was what is called a private offering. We did not go through all the mechanics of a public offering at that time. That was only a small part of the amount of money that was raised. The amount raised was in the neighbourhood of $18 million, and the $2,253,000 was only a small part.

THE CHAIRMAN: $18 million plus by way of that private placement; did you place bonds?

MR. McDONALD: $9 million bonds subordinate debenture; a bank loan to the extent of $3 million, that is also a group of B debentures, and also by

private offering to about a dozen institutions in the United States. I am not sure whether there were any Canadians in that placement, but the total was about $18 million.

THE CHAIRMAN: Including the private shares?

MR. McDONALD: Including the private shares.

THE CHAIRMAN: And that was private placement in New York?

MR. McDONALD: It was not a formal offering in the usual manner. Series B is mortgage bonds of $9,150,000, 4.14 per cent, $3,500,000 which the Royal Bank took was approximately 36 per cent or 40 per cent, whatever the proportion was. Series B supported debentures, $3,100,000; total shares 2,523,000. That is the total grouping of that particular offer.

THE CHAIRMAN: Were those notes short-term notes, the ones you speak of?

MR. McDONALD: They are described in my summary, 4 1/4 per cent notes maturing $875,000 semi-annually from May 2, 1960 to November 1, 1961.

THE CHAIRMAN: They were relatively short-term notes?

MR. McDONALD: That is right.

THE CHAIRMAN: I assume they were taken by the Royal Bank for their New York agency?

MR. McDONALD: That is right.

THE CHAIRMAN: But none of them were ever

offered to any institution or investor in Canada?

MR. McDONALD: They were taken by the Mellon Trust, the First National City Bank, the Royal Bank and the National Bank in Seattle for a very small amount. I might say, however, in the statement I go into some detail about the total holding in Canada and the United States.

The issue of the 625,000 shares and the existence of the options outstanding at the time of initial financing have not added in any way to the cost of service rendered by Westcoast to its customers in Canada or in the United States, or in any way lowered its ability to pay the maximum price of gas to the producers, or adversely affected the financing of the company. The prospectuses of the company fully disclosed the situation both to the prospective purchasers of shares and to the investors in the securities of the company. By investors I mean the insurance companies and banks who were fully informed and fully appraised of the effect on the ability of the company to operate on the basis of the 625,000 shares issued and the options outstanding before they entered into the bond purchase agreements under which they provided $121,650,000 to the company.

I might point out in this type of financing the bond purchase agreements included as part of the representations, that all of the loans that

are made from time to time, a copy of all prospectuses of the company are submitted and I would like to say, for the benefit of the Commission, having raised this $95 million, that there was not one iota of information regarding Westcoast that was not thoroughly investigated by the bond purchasers, on each demand that the company went to the bond holders to draw an additional amount of bonds. In other words, five times we went through a searching investigation by these investors. In regard to that, they have what they call a formal closing and we are again examined, and then, and then only, are these people obligated to put up the money.

THE CHAIRMAN: I think the Commission understands the operations of the company.

In view of the questions asked of the witnesses for Alberta and Southern, I am sure that the Commission desires information as to the distribution of the securities of Westcoast.

As set out in the prospectus of the company the securities have been distributed in Canada and the United States. The prospectus of April 16, 1956, sets out the details of the sale of the bonds, Series A, and 3 1/2% bank loan, 3 1/2% debentures.

I might explain the 3 1/2% debenture is the participation of the Royal Bank of Canada and in all respects is identical and the subordinate debentures Series A. The prospectus of September 11, 1957, details the particulars of the sale of the convertible subordinate debentures Series C.

I might point to the members of the Commission if they want to look at the interest rates and the details of the interest they are set out in the capital structure, which is Appendix A to my brief. You will note the first mortgage bonds are 5 per cent interest and some are at 5 1/2 per cent and are payable in accordance with the summary as set out in my brief. The conversion for the Series C debentures is already set out on page 81 of the brief.

A summary of the total distribution of the securities of Westcoast as of this date is as follows:

	Total	Canada	U.S.
First Mortgage Pipe Line Bonds	$92,150,000	$48,500,000	$43,650,000
Bank Loans	33,000,000	11,750,000	21,260,000
Subordinate Debentures	48,600,000	18,300,000	30,300,000
Total	$173,750,000	$78,540,000	$95,210,000

You will note of the total of $173,540,000, $78,540,000 came from sources of funds in Canada.

I refer to that later on, Mr. Chairman.

The balance only, namely, $95,210,000, has been furnished from sources of funds in the United States.

In view of Mr. Frawley's questions of the witnesses for Alberta and Southern, I furnish to the Commission the following information:-

THE CHAIRMAN: Before you go any further on that I would get clarification of those figures that you have just given us as to distribution between Canada and the United States compiled from your agreement with your various underwriters.

MR. McDONALD: Yes. With regard to the debentures, the prospectus will disclose that.

THE CHAIRMAN: That is right.

MR. McDONALD: Except for the placement I referred to in January.

THE CHAIRMAN: But your first mortgage bonds and your mortgage debentures in reality

you wouldn't know, would you, whether a good many of those bonds would be by Canadian underwriters and not taken up by Canadians and sold in New York?

MR. McDONALD: No, Mr. Chairman, the first mortgage bonds have all been sold by private placement, and I am quite sure that outside of a very, very infinitesimal amount, they still have the original purchasers who I will name in a few moments.

THE CHAIRMAN: Right.

MR. McDONALD: As to the initial sale of $83,000,000 bonds Series A, the institutions in Canada who were judged to have an interest in the purchase of the bonds, were contacted. These included the insurance companies in Canada. The insurance companies were offered the amount of bonds they desired to purchase at the rate of interest which the company was able to negotiate in the United States.

I might say, for the record, that the figures I have used in this summary are United States funds. I have not attempted to evaluate the exchange differential that actually enters into the account.

The companies with head offices in Canada purchased $8,500,000 of the bonds. The Metropolitan Life Insurance Company purchased $40,000,000 of the

bonds. The Metropolitan Life Insurance Company has deposited in its Canadian Registry $25,000,000 of the bonds which are included in the Canadian source calculation. The New York Life Insurance Company purchased bonds to the value of $15,000,000. The participation of the New York Life Insurance Company was limited by the fact that its investment was regulated by the extent of its business in Canada. In other words, the availability of funds to the New York Life Insurance Company from Canada sources was the basis for its investment in the Canadian venture. Accordingly, I have included this amount as from a Canadian source.

There may be some question as to why the Canadian insurance companies did not participate to a greater extent in this particular loan. The answer I think is obvious. The rate of interest of 4 3/8% was much lower than the prevailing rate of interest which the insurance companies could obtain in other types of securities in Canada.

With regard to the rate of interest, the principal purchasers of these bonds was Metropolitan Life, who purchased $40 million worth of bonds, and the Northwest Mutual Life Insurance Company who purchased $11 hundred million, and in accordance with the usual practice the negotiations for interest rate and so forth was with a group of three. The bonds pretty well go along with that rate.

I think, Mr. Chairman, I should put on the record the names of the companies: Sun Life Insurance Company of Canada purchased $3 million worth of bonds; the Canadian Chartered Bank, which is the Royal Bank of Canada, $2 million; Manufacturers' Life Insurance Company, $1,400,000; Great West Life Assurance Company, $750,000; Confederation Life Assurance, $300,000; Independent Order of Foresters, $250,000; Imperial Life Insurance Company of Canada, $200,000; Dominion Life Assurance Company, $100,000; North American Life Assurance Company, $100,000; National Life Assurance Company of Canada, $100,000; Mutual Life Assurance of Canada, $50,000.

Mr. Chairman, I have not added any information from Canadian sources with regard to the Northwest Life Assurance Company. It does business in Canada also, but I have no personal contact with their representative, and their negotiations were entirely with the New York company.

THE CHAIRMAN: I think we understand that Canadian offices, branches of American companies in this country, in Canada, negotiate with funds derived from Canadian sources.

MR. McDONALD: Right.

At the time the loan was offered, home loans and Canadian industries were taking the funds of these insurance companies at higher rates of

[illegible]

interest.

In respect of the second bond sale, Series B bonds, January 1957; a number of the larger Canadian companies were consulted with regard to purchasing a portion of the bonds to be offered. However, no deal was made and the bonds were purchased by the Metropolitan, New York Life Insurance Company and Massachusetts Life.

The Royal Bank of Canada has participated to the extent of about 36% in bank loans throughout the financing of Westcoast.

With regard to the initial sale of debentues, some $4,000,000 were purchased for sale in the Provinces of Alberta and British Columbia.

With respect to the sale of the $25,000,000 convertible subordunate debentures, the underwriters in Canada were offered whatever amount of the debentures they considered marketable. The Canadian underwriters purchased some $12,700,000 for distribution in Canada and the balance of $12,300,000 were distributed in the United States.

With regard to this matter of financing, Mr. Chairman, I have a calculation here which may be of interest to the Commission.

Having regard to some observations during the course of the hearing I believe that the following illustration will be of interest to the Commission.

Assuming the investment in a gas transmission pipeline is $100,000,000 and the pipeline is entitled to earn 8% net rate of return on the investment (clear of income tax) ---

THE CHAIRMAN: You mean after income tax?

MR. McDONALD: Yes, after income tax.

--- the calculation of revenue required (cost to the consumer) to earn the return stated is as follows for each of two situations, namely, (1) where proceeds of shares equals 15% of the investment and (2) where the proceeds of shares equals 30% of the investment.

My capital structure, Mr. Chairman, closely resembles the percentage in the Westcoast project.

Capital Structure	Case 1	Case 2
Bonds	$55,000,000	$55,000,000
Bank Loans	15,000,000	15,000,000
Subordinate Debentures	15,000,000	--
Shares	15,000,000	30,000,000
	$100,000,000	$100,000,000
Total Return @ 8%	8,000,000	8,000,000
Less Interest	4,250,000	

You will note the interest which is included in Case 1 is $4,250,000. That is 5% of $85 million.

	Case 1		Case 2	
Total Return @ 8%	$8,000,000		$8,000,000	
Less Interest	4,250,000	(A)	3,500,000	(B)
Balance to come from net income	3,750,000		4,500,000	
Income Taxes 47/53 of net income	3,325,000		3,990,000	
Total income required before taxes	7,075,000		8,490,000	
Total interest and income before taxes or revenue required to produce 8% return	$11,325,000		$11,990,000	
Difference		$665,000		

(A) 5% on $85,000,000 interest bearing debt

(B) 5% on $70,000,000

It will be observed that in Case 1 the total revenue required is $665,000 less than in Case 2.

I would like to say, Mr. Chairman, just as a matter of comment, on the calculation I have just referred to in Case 1 there is more money available and obviously there is less money required from the consumers, or, alternately, there is more money to be paid to the producer or party supplying the gas.

THE CHAIRMAN: Or to the holder of the debenture.

MR. McDONALD: That is right, Mr. Chairman.

THE CHAIRMAN: Thank you very much, Mr.

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McDonald.

BY MR. PATTILLO:

Q. Mr. McDonald, I don't propose to ask you any questions at the moment regarding that supplementary submission.

I would like to go back now to this matter of the cost of transmission of the gas. Have you worked out for me your figure for cost of transmission in the manner in which I asked it to be done?

MR. McDONALD: Yes, Mr. Hetherington has an explanation of the figures that we have got together.

MR. HETHERINGTON: Because our project is fairly complicated, it is not a simple matter to give you the answer you wanted, and I have attempted to do the best I can in splitting it up in the time that we had with the information that is available right now, and it is not too far wrong. I will give you the qualifications as I explain what I did.

Our pipeline system has three principal parts. It has the transmission pipeline itself, which is a 30-inch diameter pipeline, plus the pipeline that runs from Fort St. John roughly to the Alberta border. It is the main line and there is 60 miles of 30-inch diameter and 27 miles of 6-

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

inch line, and that is the main line.

Item 2 is the gathering system. The gathering system includes a wide variety of pipe sizes and mileages.

The third item is the gas processing plant.

Now, I have taken Exhibit C, which is the last tab in this green-bound volume, and I have used the figures there through that exhibit and I have broken them down as between pipeline, gathering system and plant, so that I could separate out the pipeline part of it. This is the only part that you can rightly speak of as a transmission cost per MCF per 100 miles of pipeline.

Now, I have done this on an engineering basis rather than on an accounting basis because we carry all our properties together even though Westcoast Transmission Company in Alberta own Alberta Transmission and Westcoast may own it in B.C., but we carry all the properties together and I am sure the accounting department could set it out exactly, but I have done it on an engineering basis and I would like you to treat the figures accordingly. They may be correct a million dollars plus or minus, but that is not of overall importance. The cost, taking the year 1958, the cost attributable to the pipeline itself amounts to $15,826,000 during that year, and during that year, as Exhibit C

shows, we would expect to make on the projection set forth in Exhibit C 4.4 per cent return, that is after allowance for future income taxes and actually the way we will pay tax we are using depreciation; that income tax can be reduced during the initial years; and on that basis the return will be 4.64 per cent before allowing for provision for future income tax.

Now, I have taken a designed capacity of 450 million cubic feet per day. I should correct that. That is the actual capacity. Our engineers have tested that and they figure we can put out 450 million cubic feet per day.

Now, with the 90 per cent load factor the annual volume of gas transported would be 147.825 billion cubic feet.

THE CHAIRMAN: Would you repeat that?

MR. HETHERINGTON: 147.825 billion cubic feet.

At 80 per cent load factor the volume transported would be 131.4 billion cubic feet and at 70 per cent load factor the volume transported would be 114.975 billion cubic feet.

On that basis, dividing this volume and using the length of pipeline of 687 miles at 90 per cent load factor the transportation cost in cents per MCF per 100 miles would be 1.65¢; at 80 per cent it would be 1.75¢, and at 70 per cent it

[illegible]

would be 2¢.

Now, in 1959 I have done the same thing from the same exhibit and for a 90 per cent load factor the cost would be 1.86¢; 80 per cent load factor, 2.08¢; and 70 per cent load factor, 2.38¢; and in 1959 the corresponding rate of return would be 5.62 per cent after allowance for deferred income taxes and 6.84 per cent before allowance for deferred income taxes.

Now, in the year 1960, still on Exhibit C, using these same figures, the annual cost would be $19,207,000. The cost in cents per MCF per 100 miles at 90 per cent load factor would be 1.89¢; at 80 per cent load factor, 2.13¢; and at 70 per cent load factor, 2.43¢. The corresponding rates of return -- and these are shown on the exhibit -- are 5.92 per cent after allowance for deferred income tax, or 7.34 on the actual basis that we will offer it before an allowance for deferred income tax.

Now, Mr. Pattillo asked me to give him a figure that would result if we had a 7 1/2 per cent return, and we don't have that on Exhibit C, but I have made a calculation.

Taking the year 1960 and assuming that, or making a calculation to see what the revenue requirements would be if we did make a 7 1/2 per cent return after allowance for deferred income

tax, it would be maybe 8 1/2 or 9 before allowance for income tax, and in order to make that 7 1/2 per cent return we need a return, that is interest plus net income, of about $10,550,000, which, after interest, would be a net income of $4,464,000. That would require an income of $3,960,000.

So taking the same evidence for 1960 for the operation, maintenance, administration in general, depreciation and taxes and interest and add in this increased net income and increased income taxes I arrive at the cost of service or the cost of transportation is $23,495,000.

Now, at a 90 per cent load factor transportation cost would be 2.31¢ per MCF per 100 miles; at 80 per cent load, 2.6; and at 70 per cent load factor, 2.97¢.

MR. PATTILLO: Q. Just taking those figures that you have been employing, Mr. Hetherington, first of all will you tell me why in making these calculations, particularly for the year 1958, you have used a 90 per cent, 80 per cent and 70 per cent load factor figure where, according to my calculations at 100 per cent load factor, you would have to have 164 billion cubic feet, and the information that I had was that the sales would be for that year 96 billion cubic feet, which I worked out at 58 per cent load factor. Am I not right

about that?

MR. HETHERINGTON: Well, that is not what load factor means in the business. You might call it capacity factor. If you want to say that the capacity of the pipeline is 450 million cubic feet per day. Then if you operated that 96 billion that would come out to -- and I will take your word for the arithmetic -- 58 per cent, and that might be called capacity factor. But the year 1958 we don't have all our facilities installed and pretty well we are going to spend this year some, I think it is,$12 1/2 million on the gathering system or another million or two adding compressor units to bring this capacity up. So I don't think it is proper to take the actual amount of gas that we estimate that we will transport during 1958 and to compare that to the capacity of the pipeline that we will have after we spend our money. Now, that is why I used 90, 80, 70. I want to give you a spread to show you the trend in the cost of transporting this gas at different load factors.

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Q. I know, but I have been trying to get it from you ---

MR. HETHERINGTON: I thought that was what you wanted, Mr. Pattillo.

Q. I will tell you exactly what I wanted and let us understand it clearly. You are selling gas at 22 cents at the American border. My instructions are that you cannot sell gas at the American border at 22 cents over this pipeline and pay for it what you are paying and make a profit.

Now, every figure you have come up with attempts to show that you can, and I want to find out just how we are working these figures out. Let us start this way: I am going to use the exhibit which appears in Tab S of the Canadian Western Utilities brief and I will ask you for the figures, and I assume you have them there, and we will start off and we will take your assumption that this is a pipeline of 680 and some miles.

MR. HETHERINGTON: Well, to start off, I won't accept the Canadian Western figures as having anything to do with the Westcoast project. I will give you any figures you want on our project here.

Q. I am not going to ask you to substitute the Canadian Western figure. I will ask you to give your figures and we will work it out exactly as they have done.

Now, what do you say is the total capital cost?

MR. HETHERINGTON: Of what?

Q. For the pipeline system as it exists today, this 687 miles.

MR. HETHERINGTON: Here again, this is my engineering apportionment of how much of this belongs to the pipeline, but it is $154,285,000. That is a little high, I know, because I could not find out how to take some of the pipeline out and put it into the gathering system; but that is my memory.

Q. All right. You want to return 4.4 per cent for 1958; that is what you figure you will make. Now, 4.4 per cent, on that capital investment, will amount to how much?

MR. HETHERINGTON: I gave you the capital investment -- let us see -- the additions are going to be in the gathering system and in one compressor station. I probably should reduce that a couple of million dollars for the compressor station, because that is not installed in 1958. Say $152,000,000.

Q. All right, we start at $152,000,000. Now, the return is 4.4 on that, which will be how much?

MR. HETHERINGTON: That is about -- oh, call it $6,700,000.

Q. All right. Then your depreciation is how much?

MR. HETHERINGTON: It is -- just a minute -- it is $,358,000.

Q. And your estimated income taxes are how much?

MR. HETHERINGTON: Well, they would be about $392,000.

Q. All right. Now, transmission operation and maintenance.

MR. HETHERINGTON: $1,520,000.

Q. How much did you say that would be?

MR. HETHERINGTON: $1,520,000. That is part -- you are looking at the figure of $2,815,000?

Q. I understand part of that is split.

MR. HETHERINGTON: Right.

Q. Does the pipeline rental come into this picture?

MR. HETHERINGTON: No, that applies to transportation to Inland Natural Gas Company.

Q. How much for your administration and general expense?

MR. HETHERINGTON: $1,180,000.

Q. Local taxes?

MR. HETHERINGTON: $470,000.

Q. How much does that add up to?

MR. HETHERINGTON: Well, I add up to $15,620,000. That is pretty close.

Yes, \$15,620,000, that is right.

Q. Sales capacity per day is 450, you say?

MR. HETHERINGTON: Well, in 1958 it is something less than that. We have never given consideration as to just what our capacity was during 1958. It has to be at least 300 million cubic feet a day, under the mortgage, and the pipeline is not quite completed with respect to all of its horsepower or about 12½ million dollars worth of gathering system.

Q. Mr. McDonald told me, the other day, it had a present rated capacity of 425, with an actual capacity of 450.

MR. HETHERINGTON: That is correct. That is when we get through spending all of the money that we are spending right today and that we have financed. When all that money is spent and the pipeline facility is completed as defined in the mortgage, it will have that actual capacity.

Q. Well, what do you say? Have you an actual capacity right there now of 400?

MR. HETHERINGTON: Well, go ahead and use 450. We will try it.

Q. That would make an annual sales volume, at 100 per cent load factor, of what?

MR. HETHERINGTON: About 164 billion.

Q. Right, and with the actual volume

of 96, I think it is, 96 would be 58 per cent load factor?

MR. HETHERINGTON: Yes, that is about right.

Q. Now, you just do that arithmetic calculation for me and come up with the annual cost, per Mcf, per 100 miles at a 58 per cent load factor.

MR. HETHERINGTON: Well, just take this $15,620,000 that I said was our cost.

Q. Yes?

MR. HETHERINGTON: And that is the cost of all of the gas, and divide it by the -- you want just the over-all cost per Mcf, not per 100 miles?

Q. No, I want the annual cost per Mcf, per 100 miles.

MR. HETHERINGTON: All right. Take the $15,620,000 and divide it by 687 miles and also divide it by the 96 -- actually, the number is 96.581 billion cubic feet.

Q. All right. Will you do that?

MR. HETHERINGTON: That is 2.36 cents per Mcf, per 100 miles.

Q. All right, 2.36 cents. We are dealing here, are we not, with 687 miles at that?

MR. HETHERINGTON: Yes.

Q. Multiply that out and what does it give us as the cost of transmission over what you say is the main line?

MR. HETHERINGTON: That gives about 16 cents per Mcf.

Q. All right, and you are collecting 22 cents, at the border, and that leaves us with 6 cents. Now, how much does it cost you; how much will it cost you during the year 1958, to do these three things, which I understand all come into the picture before the transmission begins:

(1), purchase the gas; (2), gather the gas and (3), the cost of operating this scrubbing plant?

MR. HETHERINGTON: Well, the gas costs about 6 cents; that is what we are paying for it right now.

Q. Right.

MR. HETHERINGTON: And, in theory at least, the gas scrubbing plant is supposed to return enough revenue to gather and process the gas. Now, in 1958 it does not quite do that, but that is the idea; that is the way the thing was set up, so that the gas scrubbing plant would pay for the costs of processing and gathering.

Q. But it will not do it in 1958?

MR. HETHERINGTON: Not quite. It pretty nearly does.

Q. All right, then, how much will it cost in 1958?

MR. HETHERINGTON: Well, in 1958 -- I think I can best answer that by just giving the over-all cost of this. The actual average cost of all of the gas during 1958 is (and this includes your transportation, this $600,000 odd rental to Inland for transportation, and it does not include interruptible gas sold in excess of contract demand) but, on that basis, the average cost is -- I made one mistake: not including the cost of the gas, the transportation charge on the inland system, excluding that figure and also exclusive of the sale of interruptible gas over and above the contract demand, the average cost of all of our firm gas is 24 cents.

So it must have cost about 2 cents per Mcf to gather and process the gas over and above the revenue derived from the sale of the product.

Q. So that leaves 6 cents for the gas, 2 cents to gather, 16 cents to transport, and that is 24 cents, on a 4.4 per cent return.

On a 7.5 per cent return, which, as you will recall, was the figure that Mr. Kayser said would be a fair figure to allow as a return and that we should not be selling our gas to the United States unless we were getting that much on the cost of service, let us go through that figure and find out what that would allow you, at the border.

MR. HETHERINGTON: First of all, I object

to some of your qualifications to that question, because Mr. Kayser did not say we should not be selling our gas ---

MR. PATTILLO: I did not say that.

THE CHAIRMAN: Mr. Hetherington, I think Mr. Kayser said, if I recollect correctly, that the average rate of return in the United States was 6½ per cent and that, in Canada, it should be about one per cent higher and you should figure it on 7½ per cent. I think that is all Mr. Counsel is referring to.

MR. HETHERINGTON: I just did not want to get this question around to the fact that, by taking a low return, during the initial years, we were ---

MR. PATTILLO: Oh, I do not want to do that, either.

THE CHAIRMAN: That you are abandoning your position to get a 7½ per cent return?

MR. HETHERINGTON: That's right. We certainly want an 8 per cent and we will do it, shortly.

MR. PATTILLO: Q. Let us go through a 7½ per cent return for the year 1958. Now, you must have that worked out. What do you come up with there?

MR. HETHERINGTON: Well, I can get it in just one minute here. Well, now -- just one

minute -- it should be about $23,200,000. With a return of 4.4 per cent, you get $15,620,000 and to get -- the original figure we talked about a while ago after the 4.4 per cent return, was $15,620,000 and, to get up to 7½ per cent return, we would have to add about $7,600,000 to it.

Q. Making a total of $23,000,000?

MR. HETHERINGTON: $23,200,000 and, if I divided that by the 96.581 billion cubic feet, it gives about 24 cents for the transportation charge.

Q. So that the transportation charge, on that basis, added to the 8 cents, would be a total cost, with the 7½ per cent return, of 32 cents?

MR. HETHERINGTON: That would be the cost to earn a 7½ per cent return during the first year of the operation; but I have never seen a pipeline yet make a 7½ per cent return in the first year of operation. That is purely a hypothetical figure. I would like to have it.

Q. Well, now, we have got this for the first year, Mr. Hetherington. I will skip now to 1960 and perhaps, rather than take the time of the Commission, if we could have our recess now, Mr. Hetherington could work out, for the year 1960 what it would be on the basis of the estimate of what your capacity will then be and

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what your volume will then be, what the costs will be for the year 1960.

MR. HETHERINGTON: Well, I gave that in my previous answer here.

Q. Well, you gave it to me in cents per 100 miles. I would like to get it on the basis of what we are doing here, the 24 cents and the 32 cents.

MR. HETHERINGTON: Right.

THE CHAIRMAN: We shall have a break for ten minutes.

---A short recess.

THE CHAIRMAN: Mr. Pattillo?

MR. PATTILLO: Thank you, Mr. Chairman.

Q. Now, Mr. Hetherington, have you worked out these figures for 1960?

MR. HETHERINGTON: Yes. In order to make a $7\frac{1}{2}$ per cent return on the volumes of gas that we are talking about in 1960, that is 123.388 billion cubic feet a day of firm gas, the transportation cost is about 19 cents and the gathering cost is, again, about 2 cents, let us call it, and the cost of the gas is around 8 cents, so that is a total of 29 cents that we would have to get for all of the gas to make the $7\frac{1}{2}$ per cent return.

Q. What year, how far into the future do we have to go before the company could make a

$7\frac{1}{2}$ per cent return, receiving 22 cents?

MR. HETHERINGTON: Well, you have -- just on the strict statement of your question, you said continuing to receive 22 cents, and the volumes,of course, have to build up before we can earn a $7\frac{1}{2}$ per cent return.

Q. Right.

MR. HETHERINGTON: And, in order to do that, the volume would have to be very nearly the 450 million cubic feet a day that we talked about.

. Right.

MR. HETHERINGTON: That is on the assumption that the additional gas that went in to make up that 450 million cubic feet a day were sold at 22 cents.

Q. Right.

THE CHAIRMAN: Well, that is the contract, is it not, as it exists?

MR. HETHERINGTON: No, the contract right now is 300 million cubic feet a day at 22 cents.

Now, we would have to get a total throughput of the pipeline, the total throughput of the pipeline up to around 400 million -- let me put it this way: the average price between all of our sales, as I said, the average price that we receive for gas, forgetting about load factor and everything else, in 1960, is something in excess of 25 cents.

Now, if we went ahead and filled the pipeline up and sold some gas under different arrangements, that still gives us that same figure. The demand would have to get up to 450 million cubic feet a day before we would be in the 7½ per cent earnings bracket.

MR. PATTILLO: Q. And, on your calculations, that would be what year?

MR. HETHERINGTON: Well, first of all, I cannot tie it down to a year, because we do not intend to sell any more 22-cent gas or even any 25-cent gas. The arrangement we have with Pacific Northwest calls for selling them an additional 250 million cubic feet a day on November 1st of 1959.

Now, that, of course, is subject to all government regulations and getting all government authorizations, but the price that we will get for the additional gas will be of such a nature that, starting with that sale, we should be in the 7½ per cent bracket or very close to it, otherwise we just won't sell it to them.

Q. Let me see if I am straight about this: the original contract, they agreed to take how much firm a day?

MR. HETHERINGTON: 300 million cubic feet a day.

Q. Then they had a right, under the contract, to take an additional quantum at the same

price, did they not?

MR. HETHERINGTON: Well, they had that right subject to getting the necessary government authorizations.

Q. And they have exercised that option?

MR. HETHERINGTON: Well, let me explain to the Commission the circumstances behind the exercise of the option.

Our contract with Pacific Northwest requires us that when we get, under contract, an additional one trillion cubic feet of gas, we will offer them the opportunity to take another 100 million cubic feet a day.

Q. At the same price?

MR. HETHERINGTON: Well, under the same terms of price and everything else, which, again, is subject to obtaining all government authorizations, so in keeping with our contractual obligation, when we got a contract with the Phillips Petroleum Company for, actually, a trillion and a half cubic feet, we notified Pacific Northwest that we had this additional gas and they gave us notice of the exercise of the option.

Now, that still is subject to going before all of the Boards that are involved, including the Federal Power Commission.

MR. McDONALD: Mr. Pattillo, may I elaborate? The exercise of the option was conditional upon the

full amount of 250 million cubic feet of gas. In other words, 100 million feet, we did not consider, was an economic amount; so we tied it to an additional 150 million feet of gas, so, in effect, the option has not been exercised in toto, as it were.

They signified they would like the 150 million feet and the matter is now open as to discussion as to the additional amount so the net effect is that the matter is open for re-negotiation as to the exercise of the option.

MR. PATTILLO: Q. I am not too clear about this, Mr. McDonald. Under the contract dated December 11, 1954, under Article 2, page 1, the term of the contract ---

MR. McDONALD: What was that, Mr. Pattillo?

Q. Have you got the contract?

MR. McDONALD: N . If I could use the book that Mr. Patterson has -- I have lost mine somewhere.

Q. Right (Mr. Pattillo hands document to Mr. McDonald).

MR. McDONALD: Yes. Would you go ahead, Mr. Pattillo?

Q. As I understand it, on page 5, Article 2, the term of the contract was from the date until January 1st following the date of the

first delivery of gas hereunder, which would be January 1, 1958.

Is that correct?

MR. McDONALD: Is it Article 2?

Q. Article 2, page 5 of the contract dated December 11, 1954.

MR. McDONALD: Yes, I have it.

Q. Am I correct in assuming that the words I have just read, which read, ". . . this Agreement shall be and remain in force and effect from and after the date hereof. . ." -- that is, from December the 11th, 1954, until January 1st following the date of first delivery of gas hereunder, which I construe as being January 1st, 1958?

MR. McDONALD: That is right.

Q. And thereafter for a period of 20 years?

MR. McDONALD: That is right.

Q. ". . . and from year to year thereafter until terminated... ."

MR. McDONALD: That is right.

Q. On page 7, under Article IV: "The buyer agrees to take and purchase from the seller, and seller agrees to sell and deliver to the buyer 300,000 Mcf of natural gas per day at the rate of delivery hereinafter specified:" -- and for this year the contract demand is 250,000 Mcf per day; next year, starting January 1st, it will be 300,000 Mcf per day. That is correct?

MR. McDONALD: That is right.

Q. On page 8: "Buyer's right to increase contract demand: at such time as there are available to seller under the terms of seller's gas purchase contracts proven and recoverable reserves capable of delivering an additional 100

million cubic feet of gas per day over and above buyer's maximum contract demand of 300 million cubic feet of gas set forth in Section 1 of this Article IV, and over and above the requirements of seller's markets in Canada, seller shall so notify buyer in writing." Did you do that?

MR. McDONALD: Yes.

Q. "Buyer shall, for sixty days following receipt of said notice have the right to increase its contract demand hereunder by an amount not exceeding 100 million cubic feet." Did they do that?

MR. McDONALD: Yes, they did.

Q. "Should buyer desire to so increase its contract demand hereunder it shall so notify seller, specifying the date, which need not be earlier than January 1st, 1960 . . ." -- and they specified 1959, did they?

MR. McDONALD: Yes, November 1st, 1959.

Q. ". . . but with that sole exception and subject to buyer's obtention of all required authorizations, shall not be later than one year after the date of buyer's notice to seller, on which the increased contract demand is to become effective. Seller shall thereupon dedicate to the performance of seller's obligations to sell and deliver gas hereunder additional proven and recoverable gas reserves in the ratio of 10 billion

cubic feet of reserves for each 100 million cubic feet per day of additional contract demand. Seller shall be free to dispose of any portion of said additional 100 million feet of gas per day not so taken by buyer." As I follow it, when they have exercised that option, as you have told us they have done, they have an out if they can't get a permit to import; but, there isn't any out given to you?

MR. McDONALD: No, the authorizations are applicable to both parties, as I understand the contract.

Q. The next clause -- what does this mean: "The seller, at buyer's request, shall make available to the buyer in excess of the contract demand in such volumes as, in the seller's judgment, the seller shall have available for delivery to the buyer from time to time, but such deliveries shall not be construed as increasing the contract demand as herein contained."?

MR. McDONALD: Well, I will dispose of that paragraph: "Volumes in excess of contract demand" -- that means if we happen to have gas available on any day at Huntington which Pacific Northwest happens to want, and we felt like giving it to them, we would sell it at 22 cents. If we didn't have it available, or didn't want to give it to them, we don't sell it. A similar

[illegible]

situation exists in the B. C. Electric contract: it is kind of a slough over arrangement when you have excessive capacity if the purchaser wants it delivered.

I do think we should deal with our right to increase the contract demand which you read. I should detail the actual arrangement which exists. That obligation as between the parties has been modified. On May 25th, 1957, it was agreed between Westcoast and Pacific ---

Q. That is in the new contract?

MR. McDONALD: Yes, May 25th, 1957. Westcoast proposes to sell to Pacific Northwest one million cubic feet of natural gas and deliver to Pacific at Sumas. The arrangement between Westcoast and Pacific is conditional upon both Westcoast and Pacific being granted all necessary governmental and regulatory permits and authorizations required to enable them to make and take delivery of all the volumes of gas proposed to be sold or purchased, and, 100 million cubic feet per day mentioned in paragraph 2 of Article 4 of the contract dated December 11th, 1954.

This letter is, in effect, a 200 million foot contract.

That was further modified on June 8th, 1957, by the addition to the 200 million cubic feet of 50 million cubic feet; so, the total was 250

million cubic feet.

On May 25th Westcoast notified Pacific Northwest as follows: "Westcoast Transmission Company Limited does hereby give you notice that Westcoast has available to it gas purchase contracts covering proven and recoverable reserves capable of delivering an additional 100 million cubic feet of gas per day over and above Pacific Northwest's maximum contract demand of 300 million cubic feet of gas per day set forth in Section 1 of the said Article IV of the said agreement" -- December 11th, 1954. ". . . over and above the requirements of estcoast's markets in Canada. Such gas purchase contracts are subject to the obtaining by Westcoast and by your company of the required governmental authorizations permitting the sale and purchase at the International Border of both the 100 million cubic feet of gas per day under the terms of the original gas purchase agreement of December 11th, 1954, and the additional 100 million cubic feet of gas per day delivered at Sumas, Washington, as provided under the agreement of May 25th, 1957 . . . . . . this notice is expressly made subject to the obtaining of such authorizations."

The reply is also dated May 25th, 1957: "You are hereby notified that Pacific desires to increase its contract demand under the provisions

of the agreement above mentioned . . ." -- that is, December 11th, 1954 -- ". . . by the amount of 100 million cubic feet per day, the delivery of such increased volumes to commence on the 1st day of November, 1959. It is expressly understood that the availability of hereinbefore stated amount of 100 million cubic feet per day is subject to the obtaining by Pacific and by your company of the required governmental authorizations permitting the sale and purchase at the International Border at Sumas, Washington, of both the said 100 million cubic feet of gas per day and the additional 100 million cubic feet of gas per day provided under the agreement of May 25th, 1957, between our respective companies."

So, what we have actually been doing is negotiating for 250 million cubic feet of gas per day.

Q. I want to be clear about this, but before I ask you the questions I think I should go on to read Article V, which is the next Article of the contract; the one I have been referring to. That is at the bottom of page 9, headed "Price".

"Subject to the adjustments hereinafter "provided for the Seller agrees to sell "and deliver and the Buyer agrees to "accept and pay for all gas delivered "by the Seller to the Buyer under the "contract demand provisions hereof prior "to January first, 1959 demand and "commodity rates which on a 90 per cent "load factor will result in a price of "22 1/4¢ per MCF and on and after January "first, 1959, demand and commodity rates "which on a 90 per cent load factor will "result in a price of 22¢ per MCF for "gas actually delivered in excess of the "contract demand on each day during the "month. The Buyer shall pay the price "resulting from the application of the "above described payments and commodity "rates on 100 per cent load factor basis."

Now, it was following this contract, was it not, that you went back to the Conservation Board of Alberta to get a modification of your export permit?

[illegible]

[illegible]

[illegible]

[illegible]

MR. McDONALD: That is right, Mr. Pattillo.

Q. You did not need to go to any Conservation Board in British Columbia because they did not have one then; is that right?

MR. McDONALD: There is no legislation for this particular occasion.

Q. And then you went to the Transport Board?

MR. McDONALD: That is true.

Q. Now, when you were getting the permits to export gas and dealing with the total quantity requirements for the fulfilment of this contract, were the amounts allowed by the Province and by the Dominion adequate to cover, not only the 300,000 MCF per day, but the additional 100,000 MCF per day that they had been optioned to take as and when reserves were proved?

MR. McDONALD: No, they are definitely not. The license does set out in the exhibits, Mr. Pattillo, export license under Tab 3.

Q. This becomes very important, I think, and I want to try and get the facts as exact as we can.

MR. McDONALD: Yes. The license under Tab 3 is a license dated the 27th day of June, 1955.

Q. Yes.

MR. McDONALD: And it covers 125 billion cubic feet of gas per day which I calculate to

amount to an annual maximum delivery of 343 million cubic feet per day.

THE CHAIRMAN: I think, Mr. McDonald, you meant to say 125 billion cubic feet per annum.

MR. McDONALD: Yes, I am sorry, 125 billion cubic feet per annum, which equals 343 million cubic feet per day. I think, Mr. Pattillo, you will understand that our contracts, on the face of which would be 400 million cubic feet per day, but if we were going to get this additional 100 million cubic feet you refer to -- and I did, in the original application to the Department of Trade and Commerce, apply for 150 billion cubic feet per day that on subsequent discussions with Mr. Maclean and Mr. Sharp, who is Deputy Minister, I pointed out to him we did not have gas reserves under contract for 150 billion cubic feet annually after making proper allowances for the British Columbia consumer, and we agreed between us that 125 billion cubic feet per annum was the proper amount to insert in this license for the reason that we would require approximately 100 billion cubic feet for deliveries at the rate of 90 per cent of 300 million feet a day. Then you refer to the excess gas situation, and I pointed out I would just like to have the opportunity to deliver this excess gas if it happened to be available on this 100 per cent load factor, and they allowed an additional amount and

that is how we arrived at 125 billion cubic feet; but we definitely must go back to the Minister of Trade and justify the whole arrangement under which we intend to export any additional gas. We will, practically, have to do our project all over again, our economics and, particularly, make sure we are covering the Canadian industry.

Q. Without going back to the authorities in Ottawa, as the thing stands now, all that Pacific Northwest could require you to deliver is up to the 343 million cubic feet per day?

MR. McDONALD: No, no; only 300 million cubic feet per day. The additional 43 million cubic feet is what I would call gravy. We could give it to them if we wanted to, but we are not under obligation to do so and we would only do so provided it fitted into our overall operation.

Q. Now these letters you read from, May 25 of last year, 1957, we have not got those in the material you filed with us.

MR. McDONALD: They are included in what we call our consolidated volumes.

Q. The ones you brought this morning?

MR. McDONALD: What I have given you is what Mr. Hetherington and I have on our desk for daily use except for one contract, the Thermo plant contract of B.C. Electric, which I will produce during the day.

Q. There is only one other question; I want to ask you about these contracts at the moment, and that is under Tab 15 of the exhibit book. It arises out of an answer Mr. Hetherington gave a few minutes ago. Reading from the letter of December 9, 1957, which is a letter from your company to Pacific Northwest and accepted and agreed to on the same day by that company, Mr. Kayser executing the document. I am reading the second paragraph:

"This letter is to confirm the further
"agreement between our companies that
"the definitive agreement to be entered
"into pursuant to the hereinbefore men-
"tioned agreement dated May 25, 1957
"shall provide that notwithstanding the
"price provisions set forth in Article
"V in the Proof of May 25, 1957 . . ."

-- that is what I call the new proposal?

MR. McDONALD: That is right.

Q. ". . . of the proposed definitive
"agreement the amount of money to be
"paid each month for gas delivered and
"purchased . . ."

--that is on Kingsgate, is it not?

MR. McDONALD: That is right.

Q. ". . . shall not be less than the
"full cost of service incurred by West-
"coast in purchasing and transmitting

"the gas to Kingsgate, including an "annual rate of return of 7 1/2 per "cent on the net investment in the "facilities required for such delivery "of gas from time to time, such cost "of service to be determined substan- "tially in accordance with the rules "and regulations of the Federal Power "Commission."

I would just like to know: supposing the Kingsgate scheme was approved and you were going to carry it out, did you not contemplate that under that scheme Mr. Kayser, on behalf of Pacific Northwest Pipeline agreed and is agreeing that the prices that he has to pay are to be determined in a manner so that, starting immediately, you will have a return of 7 1/2 per cent per annum?

MR. McDONALD: Well, substantially that. We might, for convenience, make some adjustment, but it would be a very minor adjustment.

Q. So that would be one pipeline system that would start right off making 7 1/2 per cent?

MR. McDONALD: Yes, and I think we would be very fortunate in that situation. I think I should -- I do not want to quibble about it, Mr. Pattillo, but Westcoast and Pacific Northwest is a different type of arrangement and that is what Mr. Hetherington referred to as a new venture. It is

an entirely different situation. I would just like to put that on the record.

Q. The other thing I was going to ask you is: under this new scheme of Kingsgate, am I correct that it differs from the present Sumas deal in that there is no obligation on Mr. Kayser to take any gas if he does not want it?

MR. McDONALD: No, no, this is a take-or-pay proposition.

Q. It is a take-or-pay?

MR. McDONALD: Pacific Northwest must pay for 150 million cubic feet of gas ---

Q. Whether he takes it or not.

MR. McDONALD: Provided, of course, that we have it there. Mr. Kayser had it very clear, if because of local requirements we only have 100 million cubic feet of gas there, that he would waive the requirement that we would have to deliver that gas, so we are protected, but he has not, in any way, reduced his obligation to take the 150 million cubic feet of gas per day.

MR. PATTILLO: Mr. McDonald, I am going to ask Mr. Patterson to ask you some questions regarding the reserves and the purchase contracts, and after that I will build questions of the shares in your statement this morning.

THE CHAIRMAN: Before you proceed, Mr. Patterson, just clear me up on this, Mr. McDonald:

Q. In the contract that you had prior to the supplemental letter of May, 1957, actually Westcoast was obligated firmly to fill this additional quantity of gas under the terms of that contract, was it not?

MR. McDONALD: Subject to two conditions.

THE CHAIRMAN: Just answer it: it was obligated?

MR. McDONALD: I am sorry.

THE CHAIRMAN: -- to do so, but it didn't have a permit from -- I haven't looked at the Alberta permit -- but it didn't have a permit from the Department of Trade and Commerce which would permit it to do so?

MR. McDONALD: That is correct, and that is one of the conditions that we had in that contract. The other condition was that any gas that we offered for sale had to be in the words of the contract "shall be over and above the requirements of the Seller's market in Canada." In other words, if there is any conceivable possibility that that would

have retarded any market demands we were under no obligation to offer it to the United States.

THE CHAIRMAN: That was in your May supplemental contract?

MR. McDONALD: No, that is in the December 11th, 1954 contract.

THE CHAIRMAN: Decemoer 11th, 1954, contract?

MR. McDONALD: Yes. You see, we had two conditions: one was -- this contract was only for 300 million feet per day. Now, in the course of negotiations this 100 million feet per day was put in the ---

THE CHAIRMAN: In the main contract?

MR. McDONALD: Yes, but I insisted in the negotiations that we only sell the gas that we had above our own requirements and (2) we would only sell when we got authorizations in Canada. So that is what this option is subject to.

THE CHAIRMAN: Well, as I understand it -- I may be very wrong -- as I understand it that is not what is clearly set out in the 1954 contract, and that is why you had to have an amendment in May, 1957.

MR. McDONALD: No.

THE CHAIRMAN: Because, frankly, you were hooked under the 1954 contract.

MR. McDONALD: If we had the gas under

contract ---

THE CHAIRMAN: You were hooked.

MR. McDONALD: --- and these conditions were met, then we were obligated to deliver it; that is true.

THE CHAIRMAN: At 22¢?

MR. McDONALD: At 22¢.

THE CHAIRMAN: And you had no permit to do so?

MR. McDONALD: No, no. It was subject to two authorizations, first, the authorizations in Canada and, (2) the authorizations in the United States. Every contract we have signed, this company signed, starts out that it is subject to the current regulation -- not the current, but the authorization required to implement it.

THE CHAIRMAN: Yes. But what I am trying to get at is this: in the 1954 contract you contracts firm for 300 million feet?

MR. McDONALD: Yes, that is right.

THE CHAIRMAN: You then gave an option for an additional 100 million ---

MR. McDONALD: Cubic feet.

THE CHAIRMAN: Yes.

MR. McDONALD: Yes.

THE CHAIRMAN: But when you went for your permit to the Dominion Government you got a permit which permitted you to export 125, up to and not

exceeding 125 billion cubic feet per annum. Correct?

MR. McDONALD: That is correct.

THE CHAIRMAN: Well, then, you didn't have a sufficient amount in your permit, as I understand it, to cover your additional amount under option?

MR. McDONALD: That is right, that is true.

THE CHAIRMAN: That is what I want.

MR. McDONALD: Yes, true.

THE CHAIRMAN: I just want to get the facts.

MR. McDONALD: That is right.

THE CHAIRMAN: I mean you were hooked under that contract at 22¢ per cubic feet at the border, so in May last year, quite prudently and properly, you went to Pacific Northwest and, in effect, you got relief from this obligation?

MR. McDONALD: Yes.

THE CHAIRMAN: Isn't that the sense of it?

MR. McDONALD: That is the practical effect.

THE CHAIRMAN: You were released from the 22¢ rate. I haven't read anything that I caught that would release you from having to sell that additional gas if you did get a permit at 22¢.

MR. McDONALD: Well, the net effect is that the 100 million cubic feet option under our December, 1954 contract is now attached to an additional 150 million cubic feet of gas on which

there is no price set. The first million feet of gas is set at 22¢, but in order to sell 250 million cubic feet of gas we are free to negotiate on the 150 million cubic feet basis for which is an appropriate price for the total amount.

THE CHAIRMAN: Well, then, you are still hooked to a 22¢ price for that 100 million cubic feet provided you get the permit. All you have done is get released from being on the hook. Now you have to get a permit and they have agreed that is only an obligation if you get a permit.

MR. McDONALD: No, they always agreed to that right from the day ---

THE CHAIRMAN: Well, we are talking at cross-purposes because you had a permit that doesn't cover it. You said that a few moments ago.

MR. McDONALD: Yes, true.

THE CHAIRMAN: Well, then, you haven't got a permit for the additional 100 million feet?

MR. McDONALD: Yes.

THE CHAIRMAN: You have to get a permit?

MR. McDONALD: We have to get a permit.

THE CHAIRMAN: You have never been released from your main contract in the States of the price of 22¢?

MR. McDONALD: No, that is true.

THE CHAIRMAN: So what you, in effect, are planning to do I assume is to enjoy a better

price for the additional 150 million feet to bring the total up to 250 million feet, assuming you get the price up to a price that is going to be profitable and give you 7 1/2 per cent return?

MR. McDONALD: That would be the ultimate object of our negotiations; we will endeavour to get that.

THE CHAIRMAN: Therefore, if you didn't get the permit for the additional 150 million cubic feet plus the balance of the 100 million cubic feet not covered by this, you would have no obligation with respect to that additional 100 million cubic feet to deliver to Pacific Northwest?

MR. McDONALD: That is correct.

THE CHAIRMAN: Is that a fair summation of the present legal position?

MR. McDONALD: Yes, that is the exact position.

THE CHAIRMAN: Thank you.

MR. PATTERSON: Mr. Chairman, I received today from Mr. Hetherington certain further reports and documents which contain similar material to that which was placed before the Commission yesterday in regard to the Alberta and Southern project, and I would like to now put those in as exhibits as background material and to briefly refer to them.

I would like to put in as Exhibit C-18-2

the Consolidated Gas sales contract, Westcoast Transmission Company Limited; and as Exhibit C-18-3, Consolidated Gas purchase contract, Westcoast Transmission, and I think I am correct in saying that the documents contained in C-18-1 and 2 are solely in reference to the Peace River project.

MR. McDONALD: No, they contain all of our contracts including the contract from Southern Alberta.

---EXHIBIT NO. C-18-1: Westcoast Transmission Supplemental Statement.

---EXHIBIT NO. C-18-2: Consolidated Gas sales contract.

---EXHIBIT NO. C-18-3: Consolidated Gas purchase contract.

MR. PATTERSON: And further with respect to contracts in Southern Alberta, I have a group of letters of intent in regard to what has been referred to as the Wimborne Field that might go on as Exhibit C-18-4.

---EXHIBIT NO. C-18-4: Letters re gas purchases in the Wimborne Field, dated January 13 to January 27, 1958.

MR. PATTERSON: And, as Exhibit C-18-5 a report dated September 1, 1957, of controlled estimated natural gas reserves.

---EXHIBIT NO. C-18-5: Report of controlled estimated natural gas reserves, Peace River area, dated September 1, 1957.

MR. PATTERSON: As the sixth exhibit, a report dated the same date of available estimated gas reserves.

---EXHIBIT NO. C-18-6: Report of available estimated natural gas reserves, Peace River area, B.C.and Alberta, dated September 1, 1957.

MR. PATTERSON: Then a report, being volume 3 of three volumes submitted to the Board of Transport Commissioners in regard to gas reserves and deliverability as the next exhibit, which will be Exhibit 7, I believe.

---EXHIBIT NO. C-18-7: Submission to Board of Transport Commissioners in support of gas transmission pipeline projects, volume 3, gas reserves and deliverability.

MR. PATTERSON: Then the report of November 14, 1955, estimated natural gas reserves by Ralph E. Davis as Exhibit 8.

---EXHIBIT NO. C-18-8: Report dated November 14, 1955, estimated natural gas reserves, Peace River area, by Ralph E. Davis.

MR. PATTERSON: As Exhibit 9, the certificate of June 21, 1956, of Ralph E. Davis, bringing his previous estimate up to date.

---EXHIBIT NO. C-18-9: Certificate of Ralph E. Davis, dated June 21, 1956.

MR. PATTERSON: Then, as Exhibit 10, the certificate of May 9, 1957, of Ralph E. Davis, bringing the earlier estimates up to date.

---EXHIBIT NO. C-18-10: Certificate of Ralph E. Davis dated May 9, 1957.

MR. PATTERSON: Q. Now turning to Exhibit C-18-9, which is the letter dated June 21, 1956, or, rather,a certificate of gas supplies supplied by Mr. Davis to the bond purchasers, I note that, as of that date, he states that the date of exhaustion of the firm gas supply of Westcoast Transmission

[illegible]

[illegible]

[illegible]

[illegible]

Company Limited will be a date not earlier than January 1, 1973, and, by referring to the firm gas supply, I take it he means that gas which is actually under contract?

MR. McDONALD: Yes, and deliverable.

Q. Then he goes on and says the date of exhaustion of available gas supply will be a date not earlier than November 1, 1979,

MR. McDONALD: Yes.

Q. Now, available gas supply means what?

MR. McDONALD: That is the gas in the general area of the pipeline project, the general Peace River area.

Q. Whether or not under contract?

MR. McDONALD: Whether or not under contract.

Q. And then his letter dated May 9, 1957, again a report, I take it, to certain bond purchasers, the Metropolitan Life, New York Life and the Massachusetts Mutual Life, he states the date of exhaustion of firm gas supplies will be a date not earlier than January 1, 1976.

I take it from that that in the period between the two letters, approximately a year, you negotiated the Phillips contract, is that the one?

MR. McDONALD: That is right.

Q. That is the contract that you had reference to in regard to an additional approximately one trillion cubic feet of gas, I think you said?

MR. McDONALD: Yes, one trillion. The contract referred to on page 33 covers 62,500 Mcf per day, which is equivalent to roughly 600 billion.

Q. Now, the date of exhaustion of firm gas supply would give us, approximately, an 18-year period, as you mentioned?

MR. McDONALD: That is right.

Q. And the contract runs, of course, for 20 years. Does Westcoast believe that they can get additional gas in the Peace River country at a price such as you now have in the contracts already made to take up that gap?

MR. McDONALD: From the 18 years to the 20 years?

Q. Yes, sir.

MR. McDONALD: I believe you can.

Q. Do you think that will be from the parties now under contract solely or from parties not now under contracts?

MR. McDONALD: Oh, I would say from both.

As discoveries are made, Mr. Patterson, in the vicinity of the pipeline, the gas is readily marketable and we believe we can pick it up.

Q. Are any of the reserves that are assigned under the delivery statement at page 33 of

the submission gas cap reserves?

MR. McDONALD: Yes, I understand the White and Lloyd contract, the Blueberry Field contract, is a gas cap situation.

Q. And what effect would you say that would have on the deliverability of the 30,000 Mcf daily figure?

MR. McDONALD: It would postpone the deliverability of the gas. It would not necessarily affect the volumes available over the life of the contract with White and Lloyd.

We have put in a very substantial gathering system to that particular field.

Q. And it would postpone the deliverability for approximately what period?

MR. McDONALD: That would depend a great deal on the extent of oil flow and, secondly, on the marketability of the oil. If it is taken out in a hurry, of course, the gas would be available sooner; but in the over-all period of 20 years I think there is no question of getting a substantial volume of gas under that.

Q. And that has reference, I think, to the Mississippian pool in the Blueberry Field?

MR. McDONALD: Yes.

Q. And has a similar situation arisen with regard to the Permo-Pennsylvania pool at the Fort St. John field?

[illegible]

MR. McDONALD: No, that field is a very limited situation. It has not affected the gas situation at all.

Q. It has not put it under the same postponement calculation you made with respect to the White and Lloyd?

MR. McDONALD: No. The volume of oil discovered does not warrant giving consideration to adjusting the bonds.

MR. PATTERSON: I think, Mr. Chairman, if it meets with your approval, this might be a convenient time for adjournment.

THE CHAIRMAN: Just before we do that, I would like to ask this:

Did you say that by the end of 18 years. you would be able to purchase gas in the Peace River area at no greater amount than you are now purchasing it?

MR. McDONALD: No, I didn't mean to convey that impression.

What Mr. Patterson asked me was, "Did you intend to get additional contracts at the current offering price of Westcoast," and I suggested to him that we would get additional contracts at that price; but we will get them now, I mean, in the next year or so. We are not going to get that 20 years from now.

THE CHAIRMAN: Oh, I could not believe

my ears.

MR. McDONALD: No,no.

THE CHAIRMAN: Gentlemen, we will adjourn and reassemble at two o'clock this afternoon.

---Whereupon the hearing adjourned, at 12.15 p.m., until 2.00 p.m.

---On resuming at 2.00 p.m.

THE CHAIRMAN: Gentlemen, the Commission will now resume its hearing. Mr. Patterson?

MR. PATTERSON: Sir, with reference to the matter to which Mr. McDonald drew our attention this morning that in the gas sales contracts he was supplying us with this morning,there was not included a copy of what we refer to as the Thermo Plant contract with the British Columbia Electric Company, and he is now giving me a copy of that which I would ask to have marked as Exhibit C-18-11.

---EXHIBIT NO. C-18-11: Copy of the Thermo Plant contract with British Columbia Electric Company.

MR. PATTERSON: Q. I take it, Mr. McDonald, that from our review of the Blueberry field and the Fort St. John field that you either have or will have to amend your deliverability table in regard to the Blueberry field but that your opinion is that would not be necessary in the case of the Fort St. John field, is that right?

MR. McDONALD: Well, I could not say, Mr. Patterson. If the deliveries from the Blueberry are going to be 30 million, for which we made a contract, we do not anticipate -- in our opinion, it is not necessary to amend the deliverability schedule.

Q. Let me put it this way: I take it from my understanding of our discussion this morning that since the time of the contract the oil and gas cap problem has arisen and it is not fully known, so its effect was not fully known or anticipated at the time of the 30 million contract being signed.

MR. McDONALD: That was true but the extent of the oil content and the extent of the gas field itself has not yet been determined so, it is a matter of appraisal of the situation as the development proceeds.

Q. And as yet you have not had to re-appraise and alter the figure of 30 million a day?

MR. McDONALD: No. We anticipate taking down 30 million commencing November 1 from the Blueberry field.

Q. Of 1958?

MR. McDONALD: Yes. There are several producer horizons in the field; it is not a single horizon field.

Q. And only one horizon is affected in the problem we are discussing?

MR. McDONALD: That is right.

MR. CHAMBERS: If the Commission please, Mr. Hetherington has prepared an analysis of the field prices under the various gas supply prices with Trans-Canada, Alberta and Southern, Western on the new application, as we call it, and it occurred to us it may be of some use to the

Commission and, with your permission, I would like to have Mr. Hetherington deal with that before we proceed with the rest of the cross-examination.

MR. PATTERSON: Mr. Chairman, this will be Exhibit C-18-12.

---EXHIBIT NO. C-18-12: Comparison of gas prices Alberta fields for 20 years.

MR. HETHERINGTON: Mr. Chairman, we are offering this exhibit in view of the matters that have arisen in the last few days regarding field price paid by various people here in Alberta and it is necessary to compare these prices at comparable conditions. For example, the Trans-Canada people purchase at the Alberta pressure base at 14.4 pounds per square inch while Westcoast purchase at 15.02 pounds per square inch and Alberta and Southern purchase at another pressure base.

In this exhibit, for the 20-year period for the Westcoast contracts, I have listed the pressures of Westcoast. Westcoast has contracted with its various producers in Alberta for its new project and the corresponding prices that will be paid during these same periods by Trans-Canada and Alberta and Southern are listed.

The first two columns are the Trans-Canada prices; all of these are at 14.4 pressure base so they are comparable. In Trans-Canada, the other contracts, in 1959, started at $10\frac{1}{4}$ cents and

escalated upward. The new offer that Trans-Canada is making now, where they have made offers for 1959 it starts at 13 cents and where they made offers in 1960 it is 13¼ cents.

The next two columns show the prices for Alberta and Southern. Now, Alberta and Southern has a June 1st price date and some of ours are November 1st. I have not attempted to get that within, even, six months. These are shown for prices prevailing during the majority of the year where that year is shown on the left hand side of the page. The Pembina prices are, I do not know why these are lower, but the Pembina prices are lower and the producers, most of them had accepted.

The other offers made by Alberta and Southern to us, for example, cases where we have gas reserves or an interest in gas reserves, I am not sure but, I believe, these are the prices offered to everybody by Alberta and Southern and they will not be the prices you heard Mr. Horton refer to yesterday because I have changed the pressure base to get them all on the same basis.

This 13.2 cents on the pressure base of 14.4 is the 13½ cents Mr. Horton was talking about and, actually, the prices are exactly the same. They are just expressed on a different basis.

Now, the next column is the present Westcoast offer. We, actually, have contracts with producers to buy gas on a field gathered basis. All of these prices I have talked about so far are for field gathered gas. Trans-Canada, Alberta and Southern -- they all buy at a central point in the field. The producer must put in the production equipment, build a gathering system and deliver gas at a central point at the qualified pressure pipeline schedule. That is ordinarily referred to as field gathered gas. Westcoast's offer, as you will see, starts out higher than Alberta and Southern. In 1959 their offer is 13.20 cents and our offer is 13.42 cents. Similarly, in 1960, Alberta and Southern's offer is 13.20 cents and our price is 13.90 cents. There are differences throughout the schedule but, on the average, if you just take an arithmetical comparison of Alberta and Southern's offer and our offer, a straight arithmetical comparison, it will be almost exactly the same over this 20-year period.

Now, since our prices are higher initially, the present net worth, considering the money is received during the early part of the contract rather than the latter part, gives some little favour to our price situation.

Now, this is a good comparison for gas purchased in Alberta today on a field gathered

basis.

More important is the offer of Westcoast to purchase gas at the wellhead and under a wellhead purchase arrangement. Westcoast goes right to the Christmas tree and will see if there is a separator battery; they go to the valve, put in all the equipment necessary to dehydrate the gas, gather it, meter it, bring it to a central point, process it and make it merchantable and, in the ordinary course of field operation, it is customary to consider that it costs the producers somewhere between one and two cents per Mcf to perform those field gathering functions. You will notice in the first year, 1959, we pay, approximately, two cents more under, what is called, this Westcoast present offer for field gathered gas than we do for our initial wellhead price. For example, the initial wellhead price for Westcoast is 11½ cents. The Westcoast offer for field gathered gas, for which we have a contract with East Calgary, is 13.42; approximately, 2 cents more. In that case we pay 2 cents more for field gathered gas because that is what it costs the producer to gather it.

In 1978 that spread is dropped to one cent and that, probably, is all right too because over a 20-year period the gathering system facilities will be substantially depreciated and that one cent represents the cost of actual out-of-pocket

operation.

In our contract, for the purchase of gas at the wellhead, we have a provision: as the capacity in this big line we build is filled up, certain economies of transportation result and we pass on, in large part, those economies to the producer so that when we get it up to 250 million cubic feet per day, we will be paying one cent more, 12.45 cents per Mcf. This is for gas in 1959. When we get it up to 400 million cubic feet per day, which is even less than what Alberta and Southern proposes to take out, our wellhead price is 14.38 cents. In other words, one cent per Mcf more than Alberta and Southern prices for field gathered gas which included the one or two cents it takes to gather the gas.

THE CHAIRMAN: May I ask a question. Has this tabulation and comparison been agreed to by Trans-Canada and Alberta and Southern Company, Mr. Chambers?

MR. CHAMBERS: No.

THE CHAIRMAN: I will take your advice, Mr. Pattillo, but I do not see, with all due respect, that we can take it as anything but information. We can take it as an exhibit as to the truth of the information in it pertaining to Westcoast, but, unless counsel for Alberta and Southern and Trans-Canada agree to your figures -- I do not doubt them in any way -- I do not see how, on the record, that can stand as evidence.

MR. HETHERINGTON: That is why I gave the basis for obtaining that and I said that those were contracts that the Trans-Canada and Alberta and Southern offered to us -- and by "offered" I mean Pacific Petroleums Limited -- for the purchase of gas.

THE CHAIRMAN: Please do not misunderstand me. It is information we would like to have.

Now, let me ask this: you give this for Alberta but, under your existing operations, are not your main contracts for the purchase of gas in British Columbia?

MR. HETHERINGTON: Yes, they are.

THE CHAIRMAN: Do those prices compare

[illegible]

[illegible]

[illegible]

favourably with these?

MR. HETHERINGTON: Our original price compared favourably with Trans-Canada prices on the old contract. We are not quite as high as Trans-Canada on the old contract.

THE CHAIRMAN: What proportion of gas do you purchase in Alberta as distinct from British Columbia, on your existing operations?

MR. HETHERINGTON: We purchase approximately about two-thirds of our gas from British Columbia and one-third from Alberta.

I should point out, Mr. Chairman, I have not listed our Alberta contracts in the Peace River area in this tabulation.

THE CHAIRMAN: Then this is only, really, relative to the two applications now pending before the Oil and Gas Conservation Board?

MR. HETHERINGTON: Yes, sir.

THE CHAIRMAN: Yours and Alberta and Southern?

MR. HETHERINGTON: Yes, sir, that is what it is intended to be.

THE CHAIRMAN: It has no bearing whatsoever on the existing operation?

MR. HETHERINGTON: No, it does not.

THE CHAIRMAN: Thank you.

MR. PATTILLO: Q. And on that, am I not correct in thinking that under the existing operation,

the most a producer can get in the lifetime of his contract, if he is signed up, is 12½ cents?

MR. HETHERINGTON: That is true, for the residue gas; but, to go back to the 12½ cents that he can get, the producer having fields north of the Peace River, where the gas is wet and contains merchantable by-products, the producer gets up to 40 per cent for the by-products and, as I say, I have estimated the by-products will perhaps amount to 2 cents per Mcf. So, taking them both, the price of gas and the return for the by-products, we find an amount of 14½ cents as the highest price a producer can get from our present Peace River contracts.

Q. Now, you have not got the penalty clauses in your contracts relating to this new proposal?

MR. HETHERINGTON: No, we do not. It is a sort of -- rather than a penalty clause we started with the low figure first.

For instance, in 1959 it starts at 11½ cents and escalates up to 14.38 cents.

Q. Yes, but the prices we have been talking about up in the Peace River, are they field prices or wellhead prices?

MR. HETHERINGTON: They are field prices.

Q. So it is better to compare the 6 cents at the present time being paid up there with

the 13.42 cents you are offering down here?

MR. HETHERINGTON: Yes, sir.

Q. Now, Mr. Hetherington, I was directing your attention this morning, when we were dealing with these costs of transmission, costs of purchase and costs of gathering, you will recall, and I asked you a question and we somehow or other got side-tracked, and I want to get the thing cleared up.

At the present time, with your contract requirements to supply 300 million cubic feet a day at 22 cents, am I correct in thinking that, during the life of the contract, so long as those supplies do not increase, you will never be able to get your costs reduced to that 22 cents delivered at the American border?

MR. HETHERINGTON: We will -- that is correct, with respect to the average cost of all of the gas delivered through the pipeline.

Q. Now, then, it therefore follows that if you get permission to deliver this additional 250 million cubic feet, the first 100 million cubic feet of that will be delivered for the same price of 22 cents, under the contract, unless the contract term is changed in that respect?

MR. HETHERINGTON: Yes.

Q. And then, as I understood it, before lunch, the additional 150 million, you would be free to negotiate a new contract and you hoped, in

negotiating that new price, that you would be able to considerably improve your over-all rate of return?

MR. HETHERINGTON: Yes, that is right. I think Mr. McDonald pointed out that the arrangement we have throws the original 100 million together with the second 150 million so that whether we get the first amount or the second or get a new price for the whole, it does not make too much difference.

Q. Accordingly, therefore, in order for you to improve the situation so far as the U. S. contract is concerned, you have got to get a permit from Ottawa to permit you to export additional gas through the present facilities to Sumas?

MR. HETHERINGTON: Yes.

Q. Now, am I correct in thinking, from what you have told us, that the profit that you are going to make and which you project at the present time, in the light of what you have told us about the American contract now and the costs involved there is all predicated on two things: (1), the prices paid for gas by Canadian consumers and, (2) the low prices paid to the producers in the field?

MR. HETHERINGTON: Well, no. The projection that we have made, and we have not submitted to this Commission, but wherever we have made a

[illegible]

[illegible]

[illegible]

[illegible]

project of our future operating results we have assumed that we are going to go ahead and sell an additional 250 million cubic feet per day to the States, at a higher price, and that we will be able to pay a higher wellhead price.

Q. From your experience in the gas industry, would you anticipate that the FPC would permit you to charge a price for this additional 150 million cubic feet of gas which would permit a rate of more than 7½ per cent calculated on that only?

MR. HETHERINGTON: Well, I don't think the Federal Power Commission is going to go beyond the border as far as a rate of return is concerned. We will make the contract with our suppliers and then, in turn, with the approval of their customers, will consider this, and that contract will be submitted to the Federal Power Commission for approval, and they never have gone behind the international border as far as rates of return on a Canadian commodity are concerned.

So I think the Federal Power Commission will simply decide, when they look at this contract, is it in the public interest to permit the import of this gas under the terms of the contract and if the gas is needed and the price is reasonable and competitive within the United States I would have every expectation that they would grant the

authorization.

Q. In order to bring your contract back into line, the price you would have at Sumas for the 150 million cubic feet would be considerably higher than the projected price that Alberta and Southern were telling us about yesterday, where they crossed the border, would it not?

MR. HETHERINGTON: Yes, sir, if you just restrict the increased price to the 150 million cubic feet I believe that is correct.

Q. Can we get back now to this, then: unless you do obtain a permit to export additional quantities of gas to the United States at Sumas, under the present situation as it exists today, the Canadian consumer on this line and the producers supplying this line will be the two groups which are subsidizing the sales to the United States?

MR. HETHERINGTON: No, I don't agree with that.

Q. Well, if we have it very clearly that we cannot put gas at the border for the United States consumer at 22 cents, which is the highest price we get for the present contract demands, and yet you project a profit on your operations, would you please explain to me how you can have a profit unless the Canadian consumer and the producer are providing it?

MR. McDONALD: Mr. Pattillo, the question

asked is the question you asked me several days ago which, at that time, I dealt with. Now, if you would like Mr. Hetherington to deal with it again, he is prepared to do so.

Q. Well, Mr. McDonald, I am quite content that you deal with it. The only thing is that you will remember that you dealt with it the other day at a time when we had a transmission cost of 13.5 cents and now we have a different transmission cost and one which I think, with great respect, is much more realistic. Also, we have it clear now that we cannot get gas to the border for 22 cents.

Now, on that assumption and assuming you do not get additional supplies, that you do not get a permit to export, I want to know if it is not so that the Canadian consumer and the producer are the ones providing the profit?

MR. McDONALD: Let me put it this way, Mr. Pattillo: I detailed that considerably, some days ago, giving the allocation of costs between these two contracts which, in my opinion, is the proper way to evaluate the costs as between the B.C. consumer and the consumer in the United States. Now, that is the evidence on which this company stands.

Now, Mr. Hetherington has gone into it again and we have detailed it, with a great deal

more detail than the type of estimate which I submitted to you the other day on the record. If convenient, Mr. Hetherington could speak to it now.

Q. That is quite satisfactory. We are trying to get at the facts, Mr. McDonald.

MR. HETHERINGTON: I have used, as a basis for going into more detail the general method that Mr. McDonald had used in arriving at his answer, I have used the same general breakdown of the costs as contained in our Exhibit C, which is in the green book that I described this morning earlier, in arriving at the cost per Mcf per 100 miles of transportation.

Now, this allocation is done on the basis of dividing costs between those costs which go on whether or not you put any gas through the pipe-line, and I will use the broad term -- this is not the strict definition, but I will use the broad term of demand or capacity costs for such items as our bond mortgage, which goes on whether or not we shut down or continue to operate; we still have interest; the rate of return goes on; we must pay income tax; we must accrue depreciation and there is amortization on certain items which must continue whether or not we put 100 million, 200 million or 300 million cubic feet through the pipe-line, so I will call those "demand costs".

Then there are costs like operation and

maintenance. If we were not putting any gas through the pipeline and just shut down and dismissed all the employees -- we might keep a treasurer around, or something, to write cheques for interest -- but there would not be any costs of operation or maintenance if we shut down.

Similarly, with respect to administrative and general costs, if we were not putting any gas through the pipeline we would not have any administrative and general costs.

Now, I will call those costs, and here again I am using the loose definition of the word, "commodity costs".

Also, the cost of purchasing gas falls into that same category and the cost of producing by-products, because if we purchase twice as much gas we are going to have to pay twice as many dollars.

Now, the operation and maintenance and administrative and general costs are not exactly proportionate to the amount of gas coming through the pipeline but they compare, in general relationship, to the amount of gas. If you doubled the amount of gas going through the pipeline you have to run three or four times as much compressor horsepower and that possibly doubles the cost relating to that operation.

So, generally speaking, these costs which I will call "commodity costs" are related to the number of cubic feet you put through the pipeline.

Now, I have taken annual costs. Let us use the year 1959 for an example here. I have taken annual costs from this Exhibit C and put all of the first items, that is the gas and by-products, operation and maintenance and administrative and general into the commodity costs, and all the other costs related to the capital invested I put into a category called "demand costs", and I have divided the pipeline and gathering system and plant out, and there are a number of complications I do not think I need to explain, such as that I have credited the revenue from the scrubbing plant back to the costs of operating the scrubbing plant as between demand and commodity in the same proportion that the demand and commodity costs bear and, on that basis, I have to get a little credit from the operation of the scrubbing plant.

Now, on that basis, I end up that in 1959 the total cost that might be lumped as, say, to a demand cost, amounts to $17,452,000. The total costs that might be called commodity costs total $11,669,000. Now, I am going to allocate the demand costs in proportion to the maximum day capacity of the system reserves for each market,

[illegible]

and that is a fairly common method of doing it. In other words, the demand costs are related to how much you need on the peak day. The pipeline capacity is a daily designed capacity and, to put out this 450 million cubic feet of capacity, we have said that 300 million feet should be allocated to the United States in support of our contract and we have allocated 150 million feet in support of the British Columbia contracts.

So, dividing those demand costs of $17,452,000 between the United States and Canada on the basis of the capacity reserved, the demand charge applicable to the United States market is $11,635,000, and the demand charge applicable to the Canadian market is $5,817,000.

Now, the commodity costs, as I said, on the basis of this study, vary with the volume of the gas throughput, so dividing the total commodity costs of $11,669,000 by the amount of firm sales, which is 118.127 billion cubic feet annually, that gets you to about 9.88 cents per Mcf as the average commodity cost and, applying that back to the gas used in the United States and applying it back to the gas used in Canada, I arrived at the commodity costs applicable to the U. S. market as $9,849,000 and at a commodity cost applicable to the British Columbia market of $1,821,000.

Then I have to add also into the costs

that pertain to British Columbia the $622,000 pipeline rental paid to Inland Natural Gas Company for deliveries in the Okanagan Valley and the West Kootenays, so I arrive at a total cost that can be related to the sales in the United States of $21,483,000 and that turns out to be 21.55 cents per Mcf.

Similarly, in British Columbia, the total cost of the figures I have given you is $8,260,000 or a cost to us of 44.79 cents per Mcf.

Now, we are actually charging a little more than the cost on our American sales so that brings the B. C. gas down to this average price.

Now, on the basis of this allocation, which allocates both the capacity we are reserving for the various markets and also takes into account all the operations of delivering one cubic foot to the end of the line, I can only say the prices we have are reasonable -- you can only be approximate in these things -- the prices have been fairly reasonable in representing a proper allocation of costs between United States and Canadian markets for the service provided.

Q. What did you say the cost was that you arrived at for the United States?

MR. HETHERINGTON: 21.55 cents per Mcf.

Q. And you say that includes a return of how much?

MR. HETHERINGTON: Well, that includes the return that is contained in Exhibit C, the green book, for the year 1959, which is 5.62 per cent after allowance for deferred income taxes, or 6.84 per cent before that allowance.

Q. Well, it certainly shows what you can do with figures, doesn't it, Mr. Hetherington? I mean, if the information you gave us this morning is right as to what you have to charge to put 300,000 Mcf through this line to the U. S. customer which, as I understood, for the year 1960, would arrive at 32 cents in order to get a 7½ per cent return ---

MR. HETHERINGTON: Mind you, here I am not talking about a 7½ per cent return. I am talking about this 5.62 per cent return and, on that basis, the average cost of every Mcf of firm gas that we put through there is a little over 25 cents an Mcf, and all I have told you is that with the return that we have forecast for that year, which results in this average price of 25 cents, I have said the proper allocation made on a basis of what I have said -- which is a matter of judgment, as all allocations are -- but on that basis the 25 cents breaks down into 21.55 cents if the large sale of 300 million cubic feet per day at 90 per cent load factor works out to 44.79 cents per Mcf for gas sold there, put through a

pipeline that had a capacity reserve for British Columbia markets of 150 million cubic feet per day.

Now, if you want this done on a $7\frac{1}{2}$ per cent return basis, then the price to both the United States and Canada would have to go up. There would still be a similar allocation.

Q. Well, let me put this to you: do you know of any other method that you could employ except this particular method of allocation which you have used which would enable you to come out with a profit on the U.S. operation?

MR. HETHERINGTON: Well, that is a rather broad question, because every engineer or economist that allocates cost of a gas pipeline and, goodness knows, there are enough of them working on rate cases throughout the country, they all have a different idea. I did not try any other particular allocation method. I just took the one I am used to and which I described to you.

Now, I would say this, that in the United States -- and I mentioned this, actually, the other day in commenting on Mr. McDonald's testimony on this same subject -- that in the United States -- and if I can go back into the history a bit as to the development of this, when the pipelines in the United States were first regulated by the Federal Power Commission, it became necessary for them to find a method of allocating costs as between

direct service, which was not regulated by the Federal Power Commission, and sales for resale that would be regulated. Many pipelines do more than half of their business going into direct service, which was outside the jurisdiction of the Federal Power Commission, so they hit upon this demand-commodity scheme I have just described and they divided the costs into costs related to capacity, which we call "demand costs", and costs related to the throughput, which we call "commodity costs", and there are, just as I mentioned, those two ways of doing it and as many ways, as many different ways also of doing it as there are people to do it.

Then they arrived at an allocation. If you put all of the demand costs against the householder, the householder ended up by paying -- it was not an unreasonable price, but the resulting price to industry, which was a direct sale customer, was quite low, and industries were using this fuel probably for water fuel, and the Federal Power Commission said, "This price of gas is so far below the competitive price for other sources of fuel that we have to do something if this formula does not come out right."

So it devolved, over a period of time, that they pretty much arbitrarily settled on assigning 50 per cent of the demand costs to the commodity costs. They put 50 per cent of the

demand costs on to the direct sale customer and 50 per cent on to the sale for resale customer.

That is, primarily, an arbitrary thing which bears no relation at all to the operation of the pipeline but, when they did that, the answer came out that gas sold to industry was more nearly competitive with the price of other fuels. In other words, it was not so far below the price of other competitive fuels as to be unreasonable.

So, throughout the use of this allocation system in the United States, that procedure was just an arbitrary split as between the fixed cost and the demand-commodity and has become a fairly standard pattern.

Now, I didn't use that split in my study here, because it is arbitrary and bears no relation to the actual operation of a pipeline. As far as we are concerned, from the standpoint of our pipeline we have paid for and set aside 150 million cubic feet of the initial capacity of the pipeline for British Columbia, and my figures are based upon putting all of this demand or capacity cost, all of it related to that assignment of capacity to British Columbia, to the British Columbia market.

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Q. Well, your method of allocation really results in this, doesn't it, that you have a batch -- I don't know whether you can refer to gas as a batch, but supposing you had a batch of gas of 100 thousand MCF headed for Sumas and then comes in another batch right behind, the same quantity, headed for Vancouver, and as I understand it the two take-off points are identical, but one, you say, only costs 21.55¢ but the other one, by this allocation method, costs you 44.79¢?

MR. HETHERINGTON: Well, that is not a proper analogy.

Q. Isn't that the result?

MR. HETHERINGTON: No, the result -- just take electricity; more people are interested in electricity.

Q. No, let's take gas.

THE CHAIRMAN: We are interested in gas.

MR. HETHERINGTON: If I could use an electric analogy. You don't batch gas to start with, but everybody ---

Q. Well, I appreciate you don't but supposing you have two nozzles, one you shoot in so much and that has to go to Sumas, and the other nozzle you shoot in exactly the same quantity but that is going to go to Vancouver; now, surely, it doesn't make sense that they both have the same logical take-off point and they both start

at the same place, but one quantity costs 21.55 and the other one costs you 44.79.

MR. HETHERINGTON: Well, I will try and stick with your batch analogy. I would like to deal on the basis of the allocation charge with the Electric Company, but let's stay with your batch analogy. Let's take what we are doing right now. Here we are putting through roughly 250 million cubic feet to Pacific Northwest, or we are putting through one batch in a pipeline, and if I can compare this capacity in the pipeline I would say today we are delivering a batch of 250 million cubic feet per day through the end of a pipeline that will carry 380 million cubic feet. So we are putting through very nearly the capacity reserved for Pacific Northwest and we are putting in nearly 35 million cubic feet that we deliver in the batch to the B.C. Electric and Inland, and we are putting that batch into a pipeline which has a capacity of 150 million cubic feet per day. So then considering the standby cost, if you want to call it that, with the standby cost of obtaining this future capacity in the pipeline along with the actual cost of 35 million cubic feet per day in the pipeline, B.C. Electric gas is going to cost more by the time it comes out the end of the pipeline.

Q. Do you say that that will still apply when the time comes -- and I think you told us it

would come pretty quickly -- in years when this line is completely filled and you are taking off for Vancouver and you are taking off for U.S. at the same point, does the same theory of yours hold true then?

MR. HETHERINGTON: Well, as I said the other day, considering the 20-year period of both of the contracts, the same theory does hold true.

THE CHAIRMAN: Would it interrupt you if I asked Mr. Hetherington one or two questions?

MR. PATTILLO: No, Mr. Chairman.

THE CHAIRMAN: Mr. Hetherington, do you follow the same system of costing, demand and commodity costing, through into Inland as you do in your distribution to B.C., the various municipalities?

MR. HETHERINGTON: Let me see if I understand your question properly. You say do we ---

THE CHAIRMAN: Yes, do you still go on that basis to Inland?

MR. HETHERINGTON: Yes, the allocation I gave just a while ago was between U.S. sales and Canadian sales, B.C. Electric, including Inland.

THE CHAIRMAN: B.C. Electric including Inland?

MR. HETHERINGTON: Yes.

THE CHAIRMAN: So that you allocate that cost in that way to Inland, do you, when you sell

to them?

MR. HETHERINGTON: Yes.

THE CHAIRMAN: The price of your gas is based on that allocation?

MR. HETHERINGTON: Well, it is based on that general theory of allocation. The actual cost to Inland and B.C. Electric is somewhat less than the allocated cost ---

THE CHAIRMAN: Is somewhat less?

MR. HETHERINGTON: Yes, is somewhat less---

THE CHAIRMAN: Why?

MR. HETHERINGTON: For instance, I came out with a price, an allocation here of 44.79¢ B.C. cost and we actually sell it for -- out there the average price is probably 34¢, something like that.

THE CHAIRMAN: You say that this is a generally accepted method of allocation of pipeline costs in the United States?

MR. HETHERINGTON: I said that with one qualification, in the United States the Federal Power Commission was trying to arrive at a proper allocation for non-regulated business which was principally industrial business and they arrived at the conclusion that in order to be competitive and not give the gas away to the industry, they should allocate 50 per cent, approximately, of these demand charges to the commodity. Now, I haven't

shown that; that is a completely arbitrary thing.

THE CHAIRMAN: But then in the United States they haven't got the problem of export, have they?

MR. HETHERINGTON: No.

THE CHAIRMAN: You would agree with that?

MR. HETHERINGTON: Yes.

THE CHAIRMAN: Would you agree that this would be a proper method of allocation of cost for Trans-Canada, this line going east, with respect to the take-off towards Emmerson and into the United States? Just your opinion.

MR. HETHERINGTON: Well, I believe this, that they certainly should prepare this allocation and take a look at it and see what the result is. I just can't guarantee it.

THE CHAIRMAN: Well, I think we can guess at the result.

MR. HETHERINGTON: That is how allocations are done.

THE CHAIRMAN: Can you tell me this, Mr. McDonald: What is Westcoast going to do with its gas in excess of the 300 plus the 150 million in the B.C. market plus the Sumas, the existing contract, which I take to be the balance of 250 million cubic feet of gas that you were proposing to sell? Correct?

What are you going to do with it if you

do not get the permit to export and Pacific Northwest doesn't get the permit to import such gas at the increased price?

MR. McDONALD: The gas, if we don't get the permit to export it, our only market is British Columbia in the Vancouver area, is the only market, and we would have to wait until the market was developed or we went out and developed a market in the sense of getting industry to come in and get it.

THE CHAIRMAN: So that your price to the B.C. market is going to be up in the neighbourhood, maybe beyond the price that you would hope to negotiate for the 250 million cubic feet to Pacific Northwest, or could it?

MR. McDONALD: Well, the price ---

THE CHAIRMAN: On this allocation, as I followed it, the Canadian consumer would still stand more of the hump proportionately ---

MR. McDONALD: No, the price the B.C. consumer would pay to us would be the contract price he has now. He would never have to pay more than that as far as we are concerned. We are obligated to deliver more than the 150 million feet, so we would be in a different category as far as allocation of cost is concerned.

THE CHAIRMAN: Well, on your allocation of costs you would have to allocate more of those costs to your Sumas contract?

MR. McDONALD: That may be so; that may be so.

THE CHAIRMAN: Sure.

MR. McDONALD: The only way you can tell, Mr. Chairman, what exactly will happen is to see what happens when the volumes are actually in the pipe.

THE CHAIRMAN: Yes, I realize that.

MR. McDONALD: If that can answer your question?

THE CHAIRMAN: The logic of the thing, if you follow Mr. Hetherington's analysis or allocation of demand and commodity cost, it means that if that were followed by Trans-Canada we would sell that gas at a favourable allocation in cost to consumers, and it means the consumer in B.C. is going to pay the differential of the price at 22¢ at the border that we all realize is far too low, and you really are hoping that you can get a permit from Ottawa and a permit from Alberta and a permit from Northwest to import into the United States at a considerably enhanced price this 150 million additional cubic feet, and 100, and make it up thereby? Isn't that the substance of it?

MR. McDONALD: I am not going to turn down any increased price, but we are not disputing that we are doing -- what we are actually discussing at the moment, Mr. Chairman, is what are the

comparative costs as they exist in this interim period.

THE CHAIRMAN: Yes, but I put to you Mr. Hetherington wouldn't have to make that type of allocation of demand and commodity cost if you had that re-negotiated price at the border.

MR. McDONALD: Oh, I think the economics of the pipeline could be all re-valued in those circumstances.

THE CHAIRMAN: Of course they could.

MR. McDONALD: Yes.

The only matter, Mr. Chairman, I must not fail to mention is, that the 300 million cubic feet has contributed to the economy of the delivery cost to the City of Vancouver.

THE CHAIRMAN: Yes, there isn't a member of this Commission that has not got that in the back of his mind, but we are interested in whether or not the gas sold at the border is a profitable operation to Westcoast. The answer is obviously no.

MR. McDONALD: Well, Mr. Chairman, we do make money on it, but whether we make as much as we could is maybe another thing.

May I say this, Mr. Chairman: I don't want to -- I learned years ago not to commit myself on things I don't know anything about, and I would hesitate to say that a similar situation with export

of gas at Emmerson on the allocation of costs we have discussed would produce a different result than that we have demonstrated here today, particularly when the market to Eastern Canada is being built up, and I would just like to say I don't want, and I am sure Mr. Hetherington doesn't want to comment on the Trans-Canada project.

THE CHAIRMAN: I am not suggesting anybody comment on it. I was just throwing it out to see what the result would be because I am sure Trans-Canada will comment on it when they are asked.

MR. HETHERINGTON: If I might also amplify what Mr. McDonald said and point out, referring to these prices without saying they are anything other than my brief, our price is 6¢ plus -- I will put in this the by-products -- which are 2¢. So we are getting 8¢ for our gas right now. We are now, by virtue of the fact we are in that business and it only takes a short connection to get an additional volume of that gas. So we are having to pay 14.38 for it and we have not got up to the full capacity that Alberta and Southern is talking about. So the fact we may be getting a low field price and maybe not making the return, doesn't mean too much when we look at the healthy appetizing market down in the United States for natural gas, and if you look at the Trans-Canada contracts the same thing happened in 1959, they offered their old

contract for 10 1/4¢. Now, they know the market in Canada is building up and apparently, without any talk of export, they are still, right today, offering 13¢, which is up quite a bit percentage-wise from their original offer. So the same thing is true of Trans-Canada. They have to take a low field price to get started, but they are in business now and the wisdom of that is shown here when they are back offering the same price and the same thing ---

THE CHAIRMAN: Now, it is my turn to play noughts and crosses. I want to get back to another subject. You said you didn't charge these -- at least, allocate these costs on the same basis through Inland and into Vancouver to the B.C. Electric. Is that right? And I forget, quite frankly, whether I asked you the question as to whether or not anybody had to go before the Board of Public Utility Commissioners and, if so, whether they looked into that?

MR. McDONALD: As far as these calculations are concerned, Inland and British Columbia cost is all lumped together in one lump. Our rates are exactly the same in both cases.

THE CHAIRMAN: They are all lumped together?

MR. McDONALD: Yes.

THE CHAIRMAN: Who goes before the Board

of Public Utilities in British Columbia?

MR. McDONALD: The Inland Natural Gas and British Columbia Electric.

THE CHAIRMAN: Does it enquire into the elements that go into the price at which Westcoast sells gas to Inland?

MR. McDONALD: No. I would say this, Mr. Chairman: in presenting the case to the Public Utilities Commission of British Columbia for a certificate of convenience and necessity, British Columbia Electric would submit the price we have with them as a sort of start of their case, and they would demonstrate to the Commission the demand and commodity rate that is set out in these contracts. They would present that through on their own operation and end up with the rate they charge to the householder, the rate they charge to cafes and restaurants and hospitals, and the rate they charge to industry. So that the British Columbia Utility Commissioner doesn't have any jurisdiction over the price, but that is the way they would start to make their own price.

THE CHAIRMAN: In other words, B.C. Electric -- shipment from Inland to B.C. Electric would be exactly the same?

MR. McDONALD: They are exactly the same.

THE CHAIRMAN: Is there an onus on them to justify that price to the Board of Public Utility

Commissioners in British Columbia? Does the Board of Public Utility Commissioners accept that as a fait accompli and start from there?

MR. McDONALD: I have not attended any of the hearings. It would be my judgment that they start with the contract, period. I mean, this is a contract which the British Columbia Electric or either company has made voluntarily, and negotiated with Westcoast, and they have then gone to the British Columbia Public Utility Commissioners and said, "We have this contract to start with. We are going to buy so much and sell it for that price", and then they get their approval from the Public Utilities Commission for British Columbia.

THE CHAIRMAN: Other than the Dominion Companies Act which would apply in certain respects to the special Act through the Parliament of Canada -- right?

MR. McDONALD: That is true.

THE CHAIRMAN: -- and the Board of Transport Commissioners with respect to a permit to export, and the Oil and Gas Conservation Board in Alberta with respect to a permit to export Alberta gas, is there any regulatory Board to which the operation -- in Canada -- to which the operations of Westcoast are subject?

MR. McDONALD: No, sir, we are under the Pipe Lines Act of Canada, which is an exhibit to

my study.

THE CHAIRMAN: Yes, but pardon me ---

MR. McDONALD: Yes. I was just going to continue that the exhibit is here and you will find that their regulation of price or rates is not applicable to a gas transmission pipeline. There is a type of regulation applicable to an oil pipeline.

THE CHAIRMAN: To an oil pipeline?

MR. McDONALD: Yes, but there is nothing --

THE CHAIRMAN: But, from the point of view of Westcoast, you are a free agent to make any price you see fit, reasonably, that a purchase will buy at?

MR. McDONALD: Our position is this: in practice, Mr. Chairman, the producer negotiates to sell the gas and we then negotiate with someone to purchase it, and both of them, I can assure you, sticks us both ways; that is how they are done ---

THE CHAIRMAN: I understand the business.

MR. McDONALD: But there is no regulatory ---

THE CHAIRMAN: But from the point of view of law and government, there is no other regulatory authority or body affects your operation other than the ones we have in this conversation, mentioned?

MR. McDONALD: That is right.

THE CHAIRMAN: Correct?

MR. McDONALD: None of them regulate the price.

THE CHAIRMAN: One other question, please. Then, has Westcoast ever had a report from an independent firm of cost accountants with respect to its contract with Pacific Northwest for the export of gas?

MR. McDONALD: Let me put it this way, that the engineers have advised us -- we have two engineers, first, Ford, Bacon & Davis, and, secondly, Bechtel Corporation, and both prepared what we call economic studies, which have been furnished to counsel for the Commission, and in addition to that Commonwealth Service, a consulting firm in Washington and New York, prepared an economic study and an analysis of the contracts both for sale and purchase, which was a direct report to the insurance company or the underwriting group.

Now, we have had no other studies except those other than the work that our own staff does under the supervision of Mr. Hetherington.

THE CHAIRMAN: No. Well, I said independent. Thank you very much.

MR. COMMISSIONER HARDY: I was a bit confused on one point. We have had a variety of opinions expressed as to the control that the Board of Public Utility Commissioners have, and there has been -- in my mind, as I understand it, we have had

about three different approaches to it. Now, we had evidence here yesterday that suggests to us that the Board of Utility Commissioners, while they wouldn't take a contract as being an accomplished fact, they might very well look into the aspects of demand costs and commodity costs to decide whether or not they were approached on a proper basis without altering the contract. I would like to get that point clear, if I may.

THE CHAIRMAN: Well, I think you are quite right; I think we have had a difference of view, and my question to Mr. McDonald was directed to the Board of Public Utility Commissioners of British Columbia. I think in that instance possibly you were referring -- or am I right in this -- through California when Mr. ---

MR. COMMISSIONER HARDY: We have had the same opinions expressed for the Alberta Board as far as I am concerned.

MR. McDONALD: I would like to comment on one phase of my brief which I was not here to present, and that is the gas sales agreement to meet Alberta's requirements which has been filed in J.T.D. 20 and the reason I mention it is because it refers to the points raised by Dr. Hardy. This contract is made between Westcoast Transmission Company Limited, which is a Federal incorporated company, and not within the jurisdiction of the authorities

of Alberta as to transmission of gas or as to operation of the pipeline. The contract is with Westcoast Transmission (Alberta) Limited, which is a wholly-owned subsidiary of the major company. Westcoast Transmission Company (Alberta) Limited is entirely within the jurisdiction of the authorities of the Province of Alberta as to location of its pipeline, construction of its pipeline, operation of its pipeline, and the rates of charges for any services rendered. It is a public utility in the Province. It is the same thing as Alberta Gas Trunk Line Limited.

Now, the purpose of this contract is to see that any gas purchased by Westooast, the parent company, say two instances, East Calgary field, Wimborne field, that we have contracted with our subsidiary to deliver that gas for re-delivery to consumers in Alberta, we covenant to make available and deliver -- in this case, the Alberta company -- such volumes of gas in each year as buyer can reasonably supply to consumers in Alberta to meet demands which cannot be reasonably supplied from gas supplies available to any company or companies engaged in distributing gas in Southwestern and Central Alberta.

MR. PATTILLO: What paragraph?

MR. McDONALD: Paragraph 2.

I anticipate that there will be a term in the Alberta permit to export this gas from Alberta

which Westcoast is applying for, which will contain these words: that we must supply from our pipeline in Alberta any reasonable requirements of consumers within Alberta. Provided -- then, so as to make doubly clear, we go on to say, "provided that in any event seller will sell and deliver to buy such volumes of gas as buyer may be directed to purchase from seller by Oil and Gas Conservation Board or any other authority in the Province of Alberta having jurisdiction . . ."

Now, the Oil and Gas Conservation Board in Alberta act upon the application of interested parties and direct the sale of gas as between individual parties. They can direct the Alberta company to sell its gas to so-and-so, and if that order is made, then the Westcoast Company Limited delivers the gas to them.

Then we come to the matter of price. If the Conservation Board exercises its discretion as to whether the gas should or shouldn't be moved and how it is to be moved, then it comes to the matter of price, and the Public Utility Act of the Province of Alberta contains a provision which says that the Public Utility Board will, upon proper hearing, fix the price at which the Oil and Gas Conservation Board has directed is to be transmitted and sold.

MR. COMMISSIONER HARDY: That is the point:

do they take your contract with B.C. Electric as -- or if is it Alberta, with some amendment -- do they take that as an accomplished fact, or would they inquire into your distribution cost and commodity cost? That is the point.

MR. McDONALD: Yes.

MR. COMMISSIONER HARDY: Would they review your analysis, your financial analysis, such as has been done here?

MR. McDONALD: Yes, and would apply the principles of economics.

MR. COMMISSIONER HARDY: They would agree or disagree with your method of distribution of these costs?

MR. McDONALD: In the Alberta case that would be so, but Westcoast has no function of that kind in B.C., so they do that for Inland Natural Gas, which has 450 miles of pipeline, and that is how they do it there.

MR. COMMISSIONER HARDY: So the B.C. Board is not operating in the same way as the Alberta Board of Utilities?

MR. McDONALD: Well, there is not this Oil and Gas Conservation Act and this special legislation with regard to gas.

MR. COMMISSIONER HARDY: Wouldn't they do just as right here ---

MR. McDONALD: They do.

MR. COMMISSIONER HARDY: Examine into your method of bookkeeping, as it were?

MR. McDONALD: Yes, certainly. There is a standard procedure in all utilities which is followed in these transactions.

THE CHAIRMAN: You said a little while ago, as I understood it, that in British Columbia the Board of Public Utility Commissioners -- or whatever you call them -- would not go behind the contract that you had made ---

MR. McDONALD: That is right.

THE CHAIRMAN: So they do not inquire, ipso facto, they do not inquire into how you made up that sale price?

MR. McDONALD: No, that is true as far as Westcoast is concerned.

THE CHAIRMAN: I wanted to make sure. That is where we started.

MR. COMMISSIONER HARDY: I thought you said the other thing to me, that they would inquire on how you made up this distribution of coats?

MR. McDONALD: No, they wouldn't inquire into the Westcoast operation because of the fact Westcoast is under Federal jurisdiction and not under the Provincial Government.

MR. FRAWLEY: If I might be permitted to follow up what you were saying to the Chairman, that the Board of Public Utility Commissioners in

British Columbia would take it as an accomplished fact that the price which B.C. Electric had agreed to pay you and wouldn't go behind it.

MR. McDONALD: That is correct.

MR. FRAWLEY: I wonder if you really meant that?

MR. McDONALD: Maybe they would inquire into it, but they would have no jurisdiction.

MR. FRAWLEY: Let me put it this way: supposing you were charging B.C. Electric, say, for the sake of my question, you were charging three times as much, and by some arrangement B.C. Electric agreed to pay three times as much, you are not saying, surely, that the B.C. Public Utility Commission would not inquire into the prudence or otherwise of that price they had agreed to pay?

MR. McDONALD: I agree with you one hundred per cent.

MR. FRAWLEY: This is an oil and gas Province; you have the Public Utilities Act with provisions which enables the Alberta Public Utilities Board to inquire into, for example, the price for which Westcoast Transmission agrees to sell to Westcoast (Alberta).

MR. McDONALD: Right.

MR. FRAWLEY: You have the Oil and Gas Conservation Board telling you must sell to Westcoast (Alberta), that is first.

MR. McDONALD: That is right.

MR. FRAWLEY: Then you have the Public Utilities Board examine into whatever price is arrived at between Westcoast -- let me stop; first, the Conservation Board doesn't concern itself with price.

MR. McDONALD: That is right.

MR. FRAWLEY: It just tells Westcoast Transmission to sell to Westcoast in Alberta, a public utility, so much gas, and so on?

MR. McDONALD: Yes.

MR. FRAWLEY: But they, the Public Utility Board in Alberta, by complaint or otherwise -- even by its own motion -- may inquire into that price by virtue of the special provision in our Public Utility Act and can conduct an inquiry into the propriety of just that very thing, the price in the contract between Westcoast Transmission and Westcoast (Alberta).

MR. McDONALD: That is right.

MR. PATTILLO: Let's get this clear: nobody has yet done so.

MR. McDONALD: Yes, the rate was fixed in Turner Valley a good many years ago.

MR. PATTILLO: No, I am saying so far as Westcoast Transmission is concerned.

MR. McDONALD: No, no.

MR. PATTILLO: And the allocation explained

by Mr. Hetherington has never been reviewed by anybody?

MR. McDONALD: Well, Mr. Pattillo, the gas we are purchasing is so far from any habitation that the question of regulation in Alberta has not arisen, and we don't anticipate it.

MR. PATTILLO: And the allocation explained by Mr. Hetherington has not been reviewed by anybody prior to this date?

MR. McDONALD: No, no.

THE CHAIRMAN: Well, gentlemen, let's have a ten-minute break.

---A short recess.

DD

THE CHAIRMAN: Gentlemen, we shall now resume the hearing.

Mr. Pattillo, before you carry on, I think some of the Commissioners would like to ask Mr. McDonald or Mr. Hetherington some questions following on our discussion immediately before the break.

MR. FRAWLEY: Mr. Chairman, I have one question to ask Mr. McDonald and I will wait until the Commission has finished, or I will put it now; whatever you wish.

THE CHAIRMAN: Certainly, Mr. Frawley, you may proceed.

MR. FRAWLEY: Mr. McDonald, I would like to ask you to turn to page 15 in your book of exhibits and it is the letter which Westcoast Transmission Company Limited wrote to Pacific Northwest on December 9, 1957. I want to call your attention to the second paragraph and, as a preface to my question, I think I will read this:

"This letter is to confirm the "further agreement between our companies "that the definitive agreement to be "entered into pursuant to the herein- "before mentioned agreement dated May "25, 1957 shall provide that notwith- "standing the price provisions set forth "in Article V in the Proof of May 25,

"1957 of the proposed definitive agree-
"ment the amount of money to be paid
"each month for gas delivered and pur-
"chased shall not be less than the full
"cost of service incurred by Westcoast
"in purchasing and transmitting the
"gas to Kingsgate, including an annual
"rate of return of 7 1/2% on the net
"investment in the facilities required
"for such delivery of gas from time to
"time, such cost of service to be deter-
"mined substantially in accordance with
"the rules and regulations of the
"Federal Power Commission."

Now, my question is: because I find some of that somewhat alarming, my question is, why should the rules and regulations of the Federal Power Commission have anything to do with the determination of the cost of service incurred by Westcoast in purchasing and transmitting Alberta gas to Kingsgate, British Columbia?

MR. McDONALD: The cost of service includes the price paid to the purchaser or, whoever delivers the gas to Westcoast.

Q. Will you say that again?

MR. McDONALD: The cost of service includes the cost of gas.

Q. It includes ---

MR. McDONALD: It includes the cost of the gas. In other words, what we would pay a purchaser for gas would be refunded by Pacific Northwest.

Q. All right, then, if that does include the cost of gas under your gas purchase contracts for Alberta gas, then is that cost of service, including, as you have told me, the purchase price of the gas, to be determined, substantially, or, otherwise, I might add, in accordance with the rules and regulations of the Federal Power Commission?

MR. McDONALD: No, the last phrase, "substantially in accordance with the rules and regulations of the Federal Power Commission" refers to the method of keeping accounts. In other words, how you figure your depreciation. What type of administration costs are allowed, what are proper costs and that type of thing. It has nothing to do with the cost of gas in the field.

Q. If I may say so, that is very reassuring. And would you say, in view of the fact that this is more than a letter, it is actually a contract, would you be bold enough to say Mr. Paul Kayser, in signing this and agreeing to it for Pacific Northwest Pipeline Corporation understands the limited meaning of that phrase, "in accordance with the rules and regulations of the

Federal Power Commission"?

MR. McDONALD: Unquestionably, because we discussed accounting, methods of accounting and what items should be included in the accounts.

Q. And it was never the intention of the parties to go one iota beyond that in respect to that phrase "in accordance with the rules and regulations of the Federal Power Commission"?

MR. McDONALD: Absolutely.

THE CHAIRMAN: Mr. McDonald, would not one reason for using that phrase be because there is no such body in Canada that you can look to as your lodestar to give you guidance in such matters?

MR. McDONALD: Yes, Mr. Chairman. This is the definitive way of doing it. It is well understood in the industry and anybody in the United States, if they saw the letter, would know what it meant.

THE CHAIRMAN: Dr. Britnell, I believe you wanted to ask a question?

MR. COMMISSIONER BRITNELL: Mr. Chairman, assuming an increase in the demand for gas in British Columbia was to the point where the volume of domestic demand and use were equal to the volume going for export, would Mr. Hetherington or Mr. McDonald consider that the sum of the fixed invariable gas, I think you used the term demand and commodity gas, are they to be re-allocated so

that one-half of the total cost would be borne by the gas going for domestic use and the other half by the gas going for export?

MR. HETHERINGTON: Dr. Britnell, I tried to answer that same question, not phrased quite as definitely, here the other day, and my answer was, at that time, and it still is -- and, in my opinion, we must look at the terms of sale, all the terms of sale at the time the sale was made, and I pointed out that when the sale was made we had a contract for 300 million cubic feet at the international border for export and we were talking with the B.C. Electric Company about buying and, I believe, the number 40 million cubic feet per day in the fifth or sixth year, and we made a contract with B.C. Electric to give them up to 130 million cubic feet per day when they needed it, and taken on the sales, I consider it a 20-year sale made as of the date that the contracts were signed, and, having regard to the situation in the relative volumes within those contracts, this situation that you mention never arose, and even under our contracts it still will not arise.

Now, if the B.C. Electric had offered to buy 380 million cubic feet per day on the day we were out there, or at the times when we were out there trying to sell gas, we would never have bothered with the United States. We would have built

the line to Vancouver and sat back and sold gas to the United States as they needed it. That is the best way I know to answer your question.

MR. COMMISSIONER BRITNELL: Mr. McDonald, let me put another hypothetical question which, I think, is a fair question, concerning cost. Supposing both the British Columbia demand and the amount going for export were to increase each year, but the proportion, the total going for export increased more than the proportion going into domestic use, would you think, then, that the proportion of the total costs allocated to the gas going for export should be increased?

MR. HETHERINGTON: I think that in the future any gas that is going to be sold to the United States, any additional gas for sale to the United States, and any additional gas for Canada will, probably, be at the same price. That is a feeling of mine. The pipeline is in business. We got the thing built and we got over all of these initial hurdles. I believe that is the situation. I might ask if Mr. McDonald has any other ideas on it?

MR. McDONALD: I am not sure I understood your question, Dr. Britnell -- I believe, at that time, in a reconsideration of the whole cost situation, there would be a new allocation.

MR. COMMISSIONER BRITNELL: You would not

stick by the propositions that are somewhat arbitrary, that the actual allocation of costs at the beginning of this first contract should continue through the entire life of the contract?

MR. McDONALD: Not necessarily. At the moment any excess costs, such as would be part of your program, are presently divided two-thirds and one-third. There would be a new allocation approaced entirely from a reconsideration.

MR. HETHERINGTON: I might point out this allocation I have referred to referred to only about two-thirds of the initial capacity of the pipeline and the remaining third was open -- the ultimate capacity of the line.

MR. COMMISSIONER LEVESQUE: Mr. McDonald, last Thursday morning you read from your brief at page 44:

"Without the sale of 300,000,000 cubic
"feet per day by Westcoast at the border,
"Westcoast could not have built a pipe-
"line from the Peace River area and
"delivered gas at Vancouver under a
"rate of about $2.00 per Mcf."

Does not this also apply to Pacific Northwest? If B.C. Had not agreed to pay 32¢ per MCF it would have been impossible to sell Pacific Northwest at 22¢ per MCF and still operate?

MR. McDONALD: If we were only going to

transmit 300 million cubic feet per day to the United States, the pacific northwest, the economics would be adjusted to that and we did not have the market so that we could have tailored our project to that situation, and the economics may be different. The 300 million cubic feet a day certainly could carry itself. The question whether Vancouver would come into the market would really not affect the market.

MR. COMMISSIONER LEVESQUE: Was the contract with B.C. Electric signed before or after the one with Pacific Northwest?

MR. McDONALD: It was after.

MR. COMMISSIONER LEVESQUE: B.C. was first?

MR. McDONALD: B.C. Electric was some months after, roughly two or two and a half months after.

MR. COMMISSIONER LEVESQUE: Had B.C. Electric agreed to buy 40 thousand MCF, whether taken or not, from Pacific Northwest, would it have affected the 32¢ per MCF? If I understand it, whether it is taken or not, they pay the same price.

MR. McDONALD: Let me put it this way, Mr. Levesque: if B.C. Electric had suggested, had been prepared to contract for 40 million cubic feet, the rate would have remained the same as it is now because the economics were based on that actual amount of gas. However, the contract does

[illegible]

[illegible]

[illegible]

[illegible]

not bind them to take the 40 million cubic feet. In other words, we made a concession to them so that if they made an error in judgment we would have the risk, or have the loss that ensued therefrom and not the utility customers in Vancouver.

MR. COMMISSIONER CUSHING: Mr. Chairman, on that same subject, I think I have all my notes clear except this one problem: I understood Mr. Hetherington to say the cost basis to the U.S. per thousand is 21.55, and your cost for B.C. consumers is 44.79.

MR. HETHERINGTON: Yes, sir.

MR. COMMISSIONER CUSHING: Is that right?

MR. HETHERINGTON: Yes, sir.

MR. COMMISSIONER CUSHING: What is the price at this moment to the B.C. consumers per thousand?

MR. HETHERINGTON: It is about 34¢; the average cost of all gas sold to B.C.; that reflects the load factor sales; the difference.

MR. COMMISSIONER CUSHING: In other words, you are billing the two consumer companies in B.C. at this moment at 34¢ per thousand?

MR. HETHERINGTON: That is what the average of all the sales amounts to.

MR. COMMISSIONER CUSHING: I have heard rumours, although they have not yet been before this Commission and we probably can get it from them

when they do appear before us, but I have heard a rumour that the customer price in the Vancouver area is about $1.30 per thousand, and even if your price of 44.79¢ was correct, it would appear there was quite a spread, and that is why, I think, we have asked some questions as to the Board of Public Utility Commissioners this morning. You say that you are billing the two companies at this moment at 34¢?

MR. McDONALD: That is on an average. Inland is billed a little higher, resulting from the fact that their load factor is lower and, also, they do not have the industry that B.C. Electric have. B.C. Electric is buying at something less than 34¢ and Inland is buying at something more than 34¢, and they average out at 34¢.

[illegible]

[illegible]

[illegible]

[illegible]

MR. COMMISSIONER CUSHING: In paragraph 5, on page 44, you state that if the Peace River gas were not available for Vancouver they would then have to buy gas from the Pacific Northwest Company and pay the increase, 17 per cent: how does the cost to the consumer in the Pacific northwest area, served by gas exported by Westcoast, compare with the cost to the consumer in the British Columbia area?

MR. McDONALD: The question you are asking is would the householder or industry in Seattle, T.coma and Portland pay higher or less than for a similar service in Vancouver?

MR. COMMISSIONER CUSHING: No; the distributing companies -- B. C. Electric against whatever distributing company there is in the Pacific?

MR. McDONALD: The rates are practically identical. They are identical except for this increase of 17 per cent which has gone into effect as of February 5th of this year. There is one difference: the industrial rate for industrial gas paid by the B. C. Electric is 22 cents per Mcf, whereas under the tariff rates in the Pacific northwest it is -- at least, it was before February 5th -- 25 cents.

MR. COMMISSIONER CUSHING: In other words, the prices in paragraph 3, the city gate

rates, paid in the United States communities from 32 to 37.4 plus the 3 cents tax plus the 17, arrives very close to the prices you are charging to the B. C. companies?

MR. McDONALD: No, no. These prices here on page 44 are a comparison of prices with Pacific Northwest. They are 90 per cent load factor. The price to the Seattle Gas Company and the price of gas of Westcoast to B. C. Electric are identical rates except that on February 5th the same rate was increased by 17 per cent as far as the Seattle Gas Company was concerned.

THE CHAIRMAN: And has another rate increase already been applied for by Pacific Northwest for that area?

MR. McDONALD: I have no news of that.

THE CHAIRMAN: I think Mr. Kayser told us that.

MR. McDONALD: I think he was referring to the 17 per cent rate that went into effect -- I am afairly sure of that.

THE CHAIRMAN: I don't want to stick you, but my recollection is that there was one increase lready in effect and another one applied for

MR. McDONALD: That may be so, but I have no knowledge of it.

MR. COMMISSIONER HOWLAND: Mr. McDonald,

I would like to change the subject a little: could you cast your mind back to the time when you were appearing before the U. S. Power Commission. I am not clear from the evidence whether the U. S. Power Commission did establish that there were sufficient reserves behind the opposition that you had -- I think the Pacific Gas Transmission Company?

MR. McDONALD: Yes, they opinioned -- the Commission, to authorize the construction of the Pacific Northwest pipeline, made the finding that there were sufficient reserves behind the line to justify the construction of the line within the ordinary rules of procedure before the Federal Power Commission.

MR. COMMISSIONER HOWLAND: To your knowledge, this was a thorough investigation?

MR. McDONALD: Yes, I made it very thorough; we contested it very bitterly.

MR. COMMISSIONER HOWLAND: Just one other question on the matter of opinion: do you think it would have been of any aid to you under those circumstances if Canada had some kind of energy authority?

MR. McDONALD: One of our difficulties was the lack of centralization of policy, as it were, with regard to gas. It could possibly have been some help.

MR. COMMISSIONER HOWLAND: I had in mind

that the U. S. Power Commission deals only with gas, and Canada also is the site of other forms of energy which are pretty valuable.

MR. McDONALD: Well, the Federal Power Commission deals with two energies: gas and electricity.

MR. COMMISSIONER HOWLAND: I am sorry.

MR. McDONALD: And water power as connected to electricity.

MR. COMMISSIONER HOWLAND: Do they deal with international energy?

MR. McDONALD: Only to the ---

MR. COMMISSIONER HOWLAND: In electricity, I mean?

MR. McDONALD: Only to the extent they exercise an investigative function of determining whether a connection across the international border shall be authorized by an executive order of the President of the United States.

MR. COMMISSIONER HOWLAND: They have nothing to do with the Columbia River, for example?

MR. McDONALD: They would have something -- I don't want to get into electricity.

MR. COMMISSIONER HOWLAND: Well, I don't either. What is the gist of your answer -- that it would or would not have been any assistance to you to have an energy authority behind you?

MR. McDONALD: It could possibly have

been some assistance. It would have centralized energy in one source in Canada and would have provided a source of contact, as it were.

MR. COMMISSIONER HARDY: I would like to ask one question on that same line, Mr. Chairman. Without getting into too much detail, Mr. McDonald, could you give us your opinion as to whether the contract that you were trying to get, that was settled by the decision of the FPC on June 20th, 1954, whether that would have resulted in cheaper gas in Vancouver than they have under your present arrangement?

MR. McDONALD: If we had succeeded in delivering the gas as we then applied, the rate would have been exactly the same rate as we are charging today.

MR. COMMISSIONER HARDY: Well, I would suggest you didn't need any help.

MR. McDONALD: Oh, no -- the amount of gas, though, Vancouver is using -- they intended to use -- would be 30 million or 40 million feet a day, and we could only build the line provided we did sell in Seattle, Tacoma and Portland up to about 150 million cubic feet a day. That was a small, 24-inch pipeline -- a different venture entirely than we have today.

MR. COMMISSIONER HARDY: In other words, you have had to deliver more gas, or export more

gas, to get as good a proposition?

MR. McDONALD: Yes, if we built a pipeline from Peace River to Vancouver to serve Vancouver alone, the gas would have been somewhere between $1.50 to $2 as contrasted to the 34 cents we are selling it at.

MR. COMMISSIONER HARDY: Under your present contract, or the arrangement you negotiated after the FPC decision of June 20th, 1954, involved the export of a greater quantity of gas than you were contemplating originally?

MR. McDONALD: That is right; twice as much.

THE CHAIRMAN: Mr. McDonald, has Westcoast made a tentative application yet, or any other kind of application, to the FPC in connection with this present application with the Oil and Gas Conservation Board?

MR. McDONALD: No, sir, the first application is before the Oil and Gas Conservation Board and the others follow from there.

THE CHAIRMAN: But as yet you have made no such tentative ---

MR. McDONALD: No. Pacific Northwest would actually make the application to the FPC and they would use the documents we are presenting to the Board of Transport Commissioners.

THE CHAIRMAN: But no such application

has been made?

MR. McDONALD: No, sir.

THE CHAIRMAN: Can you tell me, what were the terms by way of price comparable to the 22 cents we have been talking about that Pacific Northwest is obligated to pay under your existing contract -- what was the price in the contract that went by the board between Westcoast and Westcoast Transmission Inc. -- load factors being the same, and that sort of thing?

MR. McDONALD: Well, the price was about 26 cents based on 150 million cubic feet.

THE CHAIRMAN: Based on that?

MR. McDONALD: Based on 150 million cubic feet as being the sales in the fifth year.

THE CHAIRMAN: Between what?

MR. McDONALD: Based on the export at the border of 150 million cubic feet in the fifth year of operation.

THE CHAIRMAN: That contract was only for the export of 150 million cubic feet?

MR. McDONALD: Yes, that was the amount -- 150 million cubic feet per day.

THE CHAIRMAN: Yes.

MR. McDONALD: That was the market that we intended to serve in the States -- in Seattle, Tacoma and Portland, in the fifth year of operation.

THE CHAIRMAN: I am not quite sure I understand your answer to Dr. Hardy. Did you not have this export market and the price of gas to the consumer in British Columbia, you said, would be something like $1.40 or $1.50?

MR. McDONALD: No. The price of gas to the B. C. Electric, at the city gate, Vancouver, would have been somewhere around $1.50 to $2, and, of course, the consumer price would be up to around $3 or $3.25 or something of that kind.

THE CHAIRMAN: Even with the export contract, your tentative average rates for the sale of gas by Inland have been set at $1.30 per Mcf to residential and commercial consumers in B. C.?

MR. McDONALD: Yes, and similar rates, I believe, are charged in Vancouver; but that includes the cost of the distributing of the gas through the city streets and all of the investment which B. C. Electric and Inland are making in their own distribution.

THE CHAIRMAN: How would that $1.30 per 1000 cubic feet in B. C. compare to what the consumer in the Seattle-Portland, Oregon area pays today?

MR. McDONALD: I think it is almost exactly the same, from $1.25 to $1.30, something of that nature.

Mr. Chairman, before the 17 per cent

rate increase on February 5th, I do not know what has happened since.

THE CHAIRMAN: I do not know but possibly Mr. Hetherington may be the person to answer these next two questions which I have:

Mr. Hetherington, you were born and brought up and educated in the United States, is that not so?

MR. HETHERINGTON: Yes, sir, I was.

THE CHAIRMAN: You have been here since 1952?

MR. HETHERINGTON: Well, I have been living here since that time. I have been working on the Westcoast project since 1949.

THE CHAIRMAN: Prior to that, you were a senior engineer with Ford, Bacon and Davis in New York?

MR. HETHERINGTON: Yes.

THE CHAIRMAN: And your experience has been concerned primarily, since you graduated from the University of Oklahoma, in the department of natural gas technology and design and engineering of natural gas pipelines?

MR. HETHERINGTON: Yes.

THE CHAIRMAN: So you must have had a considerable experience throughout the United States on pipelines?

MR. HETHERINGTON: Well, I have.

THE CHAIRMAN: And the effect of purchasing gas and the sale of gas on the economy of the country?

MR. HETHERINGTON: Yes.

THE CHAIRMAN: Would you be good enough to give us your view as to whether or not the export of gas from the gas-producing States of the United States to other States which are not so richly endowed has increased the price to the consumer in that state or those states, the local consumer?

MR. HETHERINGTON: Well, when you asked Mr. Black that question I tried to think how I would answer it if I was asked that same question.

THE CHAIRMAN: You were going to be stuck?

MR. HETHERINGTON: It is a little difficult to answer without some generalities. I would like to say this, that, generally speaking, we will take Houston, Texas, for example. The cost of gas in Houston, Texas, is not too different, and this is the retail consumer, not too unlike the actual cost of gas in San Francisco, for example, and Houston has an industrial gas system that collects gas to run the industrial port at the Houston Ship Channel. Those are specific instances with which I am familiar. The price of that gas is not too unlike the price of gas in, we will say,

Detroit, that is sold to industries in Detroit.

The export of gas from Houston -- and, first of all, it started in northeastern Texas, in east Texas, and then, as gas became more valuable, people could afford to build pipelines into the central portion and finally it got over into the southern portion and down into Corpus Christi and Brownsville and Mexico, and I do not think that has been materially affected by that gas in Houston, as such.

Now, the cost of gas to the consumers, as you have seen today, is largely determined by the cost of the distribution. The producer gets a little bit, maybe 9 cents per Mcf in the United States today, and the average pipeline rate for selling gas, after paying this 9 cents, might be, today, 25 cents or 30 cents and in nearly every place the gas costs upwards of 75 cents by the time it gets to the consumer. The big charges are on the distribution.

So the fact that you export gas from an area like Texas may affect the field price but, even if it does, it has not changed the price to the consumer very much.

Now, there is another factor here. We have heard of 20-cent gas and 22-cent gas from the wellhead on recent purchases. Now, the gas that is purchased at these high prices today is

gas that is located in one area, generally one field with a lot of gas there that will either supply a brand new pipeline project or a substantial expansion of an existing project. When I speak of that I mean gas in the range of one trillion to three trillion cubic feet a day. These large discoveries in one location carry a premium price, for the reason that they can support an entire pipeline project, and those quantities of gas are at these high prices.

If you have gas down in Louisiana today and you are near a pipeline, you are lucky to get 8 or 9 cents for it, unless you have enough to support a big project. I give this example to show that when gas is exported, let us say, for example, from the State of Texas, if it is exported in very large quantities from a big field and some pipeline company can afford to pay 20 cents per Mcf at the wellhead for it, that really does not affect price at the smaller fields that are hooked into local supply.

Now, that is a sort of confused answer, I recognize, Mr. Chairman, but in summary I would like to say I do not believe that the export of gas actually raised the cost of gas to the ultimate consumer very much in Texas. I know the price has gone up and, in large part, it is due to the increased cost of distribution facilities;

and if the field price of gas, the higher field price paid as a result of export from Texas has increased, it has been a small factor in increasing the actual price to the ultimate consumer.

THE CHAIRMAN: Thank you. Will you tell me, in answer to this second question -- which you also probably have anticipated: has the Federal Power Commission, in your judgment, and its regulatory authority, having regard to your experience in the United States in the gas and pipeline business, been a beneficial effect in industry as a whole in the United States, including the producer and consumer?

MR. HETHERINGTON: In regard to that question, let me start with the consumer. I think that probably everyone agrees that the influence of the Federal Power Commission has been generally to protect the consumer and probably today the rates of interstate cost delivered at the various city gates of the United States is lower than it would be if there were no Federal Power Commission. So, to that extent, I am certain that the influence of the Federal Power Commission has helped the consumer. In nearly every case the cost price of gas is below the price of other competitive fuels and, if there were no Federal Power Commission, I assume the law of supply and demand would operate and the gas

would be sold on the basis of its competitive price, in which case the consumer would pay more; so it has been helpful to the consumer.

I believe the influence of the Federal Power Commission has helped, has been very helpful, in stabilizing the natural gas transmission industry. The pipeline companies individually have had problems and they are still trying to work out their problems, they are trying to get a proper consideration of rate increases so that they can continue to raise additional capital and keep solvent, but, at the same time, the influence of the Federal Power Commission has, in effect, granted -- well, it is at least a semi-monopoly, to a pipeline company serving an area, and I would not say it has guaranteed that the pipeline will have success but, within reason, the Federal Power Commission would see to it that the transmission pipeline companies get a reasonable rate of return.

So, again, I would say that the Federal Power Commission helped the -- or, rather, has been beneficial to the pipeline companies.

Now, with respect to the producers, I just hate to get into any kind of discussion about producers, because there are so many controversies right now. The Federal Power Commission declared authority, as Mr. Black told you, was sent back by the Courts and they were told, "You regulate the

[illegible]

producers."

Now, this is my own statement, but I do not think the producers, as such, agree that the Federal Power Commission has helped them any, if you talk to the individual producer.

THE CHAIRMAN: Thank you very much, Mr. Hetherington. Undoubtedly you have appeared before the Federal Power Commission many times?

MR. HETHERINGTON: Yes, I have.

THE CHAIRMAN: And you, too, Mr.McDonald?

MR. McDONALD: Yes, sir, I have appeared in the Westcoast projects.

THE CHAIRMAN: And both of you, I take it, have appeared before the Board of Transport Commissioners in Canada?

MR. McDONALD: I acted as counsel in Canada.

THE CHAIRMAN: And Mr. Hetherington has appeared?

MR. HETHERINGTON: Yes, sir.

THE CHAIRMAN: Both of you appeared?

MR. HETHERINGTON: Yes, sir.

THE CHAIRMAN: Was there anything comparable before the Board of Transport Commissioners to what you would have had to go through before the Federal Power Commission to get a permit, had you been exporting gas from the United States and the situation was reversed?

MR. McDONALD: Mr. Chairman, in our

particular case it was the first gas case and we filed exactly the same documents in the way of economic reports, reserve reports, market studies and so forth, and we presented, before the Board of Transport Commissioners, exactly the same evidence.

The only difference there was between the two hearings was that in Canada we were not opposed, in one way, not opposed in the sense that there was a very close investigation on every iota of our material, but the Board of Transport Commissioners, sitting as the Board and not through an examiner who would report to the Commission, did carry out some inquiry, but not with the same detail that we presented to the Federal Power Commission.

In the last hearing before the Federal Power Commission the proceedings involved El Paso Natural Gas, Pacific Northwest and ourselves and the time spent was about twenty days.

THE CHAIRMAN: I understand that, but in Ottawa it was an ex parte application?

MR. McDONALD: That was the situation.

THE CHAIRMAN: Just to follow that procedure for a moment, you got, then, a recommendation of the Board of Transport Commissioners to the Minister of Trade and Commerce, is that correct, or the Governor-in-Council?

MR. McDONALD: The procedure is that the Board of Transport Commissioners issued an Order authorizing Westcoast to construct its pipe-line project.

In essence, at the hearing were representatives of the Minister of Trade and Commerce and, I presume, the record was transmitted to him or to them; and, when I made my application to the Minister, I filed exactly the same economic studies I filed before the Board of Transport Commissioners and attended upon them to ascertain what they wished to discuss with regard to them.

So the practice is that only the Board of Transport Commissioners has dealt with the application. The Minister does not consider an application for an export licence.

I might point out that I have included, in my exhibits, the Order of the Board of Transport Commissioners and the reasons of the Board, for the express purpose of allowing this Commission to read it.

THE CHAIRMAN: Unfortunately, I have not had an opportunity to read all that, but was a price discussed before the Board of Transport Commissioners?

MR. McDONALD: Yes, sir.

THE CHAIRMAN: It was discussed?

MR. McDONALD: Yes, the price -- the

marketing of gas, both in Canada and the United States, was presented to the Board. Mr. Hetherington briefly presented to the Board the same material that he presented here in his adjustment of prices as between San Francisco and Seattle and Vancouver that we discussed here.

THE CHAIRMAN: And they knew you had been beaten before the FPC, let us put it that way, on a contract that was for 26 cents, but for a smaller quantity?

MR. McDONALD: Yes, I looked at the record the other day and I know that Judge Kearney, then Chairman of the Board, specifically referred to the 26 cents.

I would be glad to furnish to the Commission, if they desire, the transcript.

THE CHAIRMAN: No, I was interested as to what kind of investigation was carried out, having regard to the number of these applications which have been dealt with in this country, what kind of investigation was carried on and how thorough it was and whether the need for it was sufficiently appreciated, and I think what Mr. Hetherington has told us now and what he told us yesterday morning in effect says to the Commission that the FPC and its type of regulation has been beneficial to the consumer and to the industry as a whole in the United States.

MR. McDONALD: I agree with that, Mr. Chairman. I would like to just point out that the Board of Transport Commissioners, in both our particular case and that of Trans-Canada, investigates what reserves had been allocated by the Oil and Gas Conservation Board, and that is a fairly complete investigation, so that the Board of Transport Commissioners, in effect, had, as it were, supplementary support of the Oil and Gas Conservation Board in the Alberta permit.

THE CHAIRMAN: But what about your British Columbia supplies, because you had no Conservation Board to go up to the Board of Transport Commissioners with any recommendation?

MR. McDONALD: Yes. For that reason we produced geological evidence, a geologist and geological evidence to the Board of Transport Commissioners, who in the case of Westcoast application, consulted with the geological staff of the Department of Mines and Technical Services.

THE CHAIRMAN: But there was no report from the Province?

MR. McDONALD: The Province of British Columbia?

THE CHAIRMAN: Yes.

MR. McDONALD: No, they did not present a technical report. They attended that on behalf of -- in the matter of the political situation.

THE CHAIRMAN: Thank you very much, Mr. McDonald.

Pardon me for taking so long, Mr. Pattillo.

MR. PATTILLO: That is quite all right, Mr. Chairman, and I think you will agree with me that there is not much point in launching into the other remaining phases, which I think will probably take us somewhere in the vicinity of an hour or more in the morning.

THE CHAIRMAN: Well, then, in those

circumstances there is just one more question I would like to ask:

You undoubtedly heard what I asked Mr. Horton yesterday as to the financial structure of the gas pipeline organization and the percentage of debt to equity. Have you determined in that regard, from a point of view of Westcoast -- I mean, your existing percentage is something about 28 per cent, isn't it, of equity to debt?

MR. McDONALD: Just dealing, Mr. Chairman, with the pipeline investment only. Our present ratio of debt is first mortgage pipeline bonds, 46.4 per cent.

THE CHAIRMAN: Per cent of what?

MR. McDONALD: Per cent of the total investment in the pipeline.

THE CHAIRMAN: I wonder if we mean the same thing?

MR. McDONALD: Yes.

THE CHAIRMAN: I was just taking it on a basis roughly that you had $170 million of long-term debt and you have $50 million of capital stock.

MR. McDONALD: Yes, the $50 million -- I am sorry; the $50 million capital structure includes the acquisition of the production company which is not a pipeline investment.

THE CHAIRMAN: Oh.

MR. McDONALD: You see, there, for the purpose of comparison that is desired you might exclude the 25,869,960 from your calculations just for comparison on our present capital structure, Mr. Chairman, the 88 per cent is debt, the 88 per cent is debt and 12 per cent is the capital stock attributed to the pipeline.

THE CHAIRMAN: Oh, yes. I see what you mean. When you eliminate the liability to capital stock which is attributable to other than the pipeline construction.

MR. McDONALD: That is right, Mr. Chairman.

THE CHAIRMAN: 88 to 12.

MR. McDONALD: 88 to 12.

THE CHAIRMAN: Have you developed any philosophy in that organization as to what your gain is?

MR. McDONALD: The standard of industry is 75 per cent debt and 25 per cent preferred stock or common shares. In our particular case, Mr. Chairman, we have used instead of a preferred share a subordinate debenture which is unsecured, but it is an interest-bearing debenture; it is convertible in part.

THE CHAIRMAN: Yes. Well, I didn't have this when I asked the question. The fact is that there being a substantial number of share issued for a very low monetary consideration, your propor-

tion of equity to debt is very small.

MR. McDONALD: Yes, that is true.

THE CHAIRMAN: Is that right?

MR. McDONALD: That is right, yes.

THE CHAIRMAN: Do you want to supplement it?

MR. McDONALD: The point I want to bring to your attention is that the subordinate debenture is not a secured debt; it is a long-term debt; it is payable only at least for the largest part, only after the first mortgage bonds have been retired.

THE CHAIRMAN: Mr. McDonald, I know. I happen to have connection with a company and we have several tens of millions of subordinate debt, but we have to pay the sinking fund and we have to pay the interest on it.

MR. McDONALD: Yes, that is right.

THE CHAIRMAN: Thank you very much.

Mr. McNeill, we will receive, first thing in the morning -- do our best to get finished with the Westcoast Transmission submission, and I think that possibly if you and your clients could be prepared to go on -- I can't tell you whether it will be fifteen minutes or an hour.

MR. McNEILL: I appreciate that. We will be ready at any time.

THE CHAIRMAN: Thank you very much.

You come on in the morning again, please.

MR. McDONALD: Thank you.

THE CHAIRMAN: The hearing is adjourned until tomorrow morning at 9.45.

---Whereupon the hearing adjourned at 4.30 p.m. until 9.45 a.m., Wednesday, February 19th, 1958.

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